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SAMPLE PROCESSING FOR GEOCHRONOLOGY AND GEOCHEMISTRY

Whole rock samples were crushed with a jaw crusher and using a SELFRAG® facility (<http://www.selfrag.com>). Muscovite and biotite separates were prepared from fragmented samples using a Wilfley table and electromagnetic separation. Hornblende, zircon, and apatite were recovered using electromagnetic and organic heavy liquid separation. Parts of the whole rock samples were powdered with a conventional planetary mill for geochemical analysis.

U-PB DATING AT SENCKENBERG NATURHISTORISCHE SAMMLUNGEN DRESDEN

We selected zircons of all sizes and morphologic types and mounted them in resin and polished to about half of their thickness. Prior to dating, cathodoluminescence imaging allowed assessment of the zircon interior, in particular zonation, cores, rims, and diffusion and recrystallization characteristics. Zircons were analyzed for U, Th, and Pb isotope composition using a Thermo-Scientific Element 2 XR sector field ICP-MS coupled to a New Wave UP-193 Excimer Laser System. A teardrop-shaped, low volume laser cell developed by Ben Jähne (Dresden, Germany) was used to enable sequential sampling of heterogeneous grains (e.g., growth zones) during time resolved data acquisition. Each analysis consisted of ~15 s background acquisition followed by 35 s data acquisition, using a laser spot-size of 15–35 μm . Raw data were corrected for background signal, common Pb, laser induced elemental fractionation, instrumental mass discrimination, and time-dependent elemental fractionation of Pb/Th and Pb/U using an Excel® spreadsheet program developed by Axel Gerdes (Institute of Geosciences, Johann Wolfgang Goethe University, Frankfurt am Main, Germany). If required, common-Pb correction was carried out, based on the interference- and background-corrected ^{204}Pb signal and a model Pb composition calculated according to Stacey and Kramers (1975). The necessity of the correction was judged on whether the corrected $^{207}\text{Pb}/^{206}\text{Pb}$ lies outside of the internal errors of the measured ratios. Reported uncertainties were propagated by quadratic addition of the external reproducibility obtained from the zircon standard GJ-1 (~0.6% and 0.5%–1% for $^{207}\text{Pb}/^{206}\text{Pb}$ and $^{206}\text{Pb}/^{238}\text{U}$, respectively) during individual analytical sessions and the within-run precision of each analysis. Accuracy was monitored using Plešovice zircon (Sláma et al., 2008). Long-term monitoring of the variation in primary standard age and the reproducibility of the secondary standard age under conditions of the unknowns implies total uncertainties of ~2%. In the text and Table 1, we increased the session-specific uncertainties to at least 2% of the ages to provide a realistic account of the data quality. Concordia diagrams (2σ error ellipses) and Concordia ages (95% confidence level) were produced using Isoplot/Ex 3.70 (Ludwig, 2008). We report $^{207}\text{Pb}/^{206}\text{Pb}$ ages for zircons >1.0 Ga, and $^{206}\text{Pb}/^{238}\text{U}$ ages for younger grains. For further details on the analytical protocol and data processing, see Frei and Gerdes (2009).

U-PB DATING AT UNIVERSITY OF CALIFORNIA, SANTA BARBARA

U-Pb zircon isotopic analyses were done in a single session by laser ablation at UCSB on Nu Plasma MC-ICP-MS #69. For analytical details see Kylander-Clark and Hacker (2014).

The laser spot diameter was 30 µm and the laser fluence was ~1 J/cm². Analyses of unknowns were bracketed by analyses of zircon reference materials; 91500 was used as the primary reference (1060 ± 0.4 Ma) (Wiedenbeck et al., 1995), and accuracy was monitored using GJ1 (601.7 ± 1.3 Ma) (D. Condon, personal commun., 2012). The uncertainty of individual measurements is dominated by counting statistics and signal stability. During the course of this study, we obtained a weighted mean concordia age of 606.7 ± 2.7 Ma for GJ1 (internal uncertainties only). This age is accurate to within 0.9% of the reference value. The total uncertainty of $^{206}\text{Pb}/^{238}\text{U}$ dates was estimated from the analyses of secondary standards acquired in this and other studies over the past 8 years to be <2%; this was added in quadrature.

HF ISOTOPE MEASUREMENTS IN ZIRCON

Hf isotopic analyses were done in a single session by laser ablation at UCSB on Nu Plasma MC-ICP-MS #69. Analytical conditions and data-reduction procedures were identical to those detailed in Hagen-Peter et al. (2015).

GEOCHEMISTRY

AcmeLabs, Vancouver, Canada, determined major- and trace-element compositions of selected samples. Major element analysis employed by ICP-OES, following Li-metaborate/teraborate fusion and nitric acid digestion of 200 mg sample powder. Detection limits for major-element oxides are 0.01%, except for Fe₂O₃ and Cr₂O₃ (0.04% and 0.002%, respectively). REE and refractory trace-element concentrations were analyzed by ICP-MS from the Li-metaborate/tetraborate-nitric acid solution; precious and base metal analysis used a separate sample split (500 mg), following aqua regia digestion. Analytical precision (1σ , n = 5), determined on replicate analyses of an in-house standard, is better 1% for major element oxides (except P₂O₅: 4.4%), and better 5% for trace elements (except Ni: 14.5%).

$^{40}\text{Ar}/^{39}\text{Ar}$ DATING

We performed Ar/Ar dating at Argonlab Freiberg (ALF), TU Bergakademie Freiberg, Germany. To reach >99% purity, we handpicked the samples and ultrasonicated them in acetone and deionised water. Samples were then dried and wrapped into Al-foil and loaded in 5 × 5 mm wells on 33 mm Al discs stacked together for irradiation. Cadmium shielded neutron irradiation of samples and fluence monitors was done for 7 h in the RODEO facility of the HFR research reactor in Petten, The Netherlands. Irradiated micas were unwrapped and 2.5–3.0 mg aliquots were loaded in 3 × 1 mm (diameter × depth) wells on an oxygen free copper disc and transferred to the sample chamber. We performed step heating for micas using a floating 10.6 µm CO₂ laser system with a defocused beam at 3 mm beam diameter, followed by gas purification applying two AP10N getter pumps, one at room temperature, and one at 400 °C. Heating and cleaning times were 5 and 10 min per step, respectively. Step heating of hornblende aliquots of up to

50 mg was performed using a resistance furnace coupled to an autosampler that allows unwrapped sample transfer to the crucible (Pfänder et al., 2014). Heating time here was 7 min per step. Ar isotope compositions of individual temperature steps were measured in static mode using an ARGUS noble gas mass spectrometer equipped with five faraday cups and 10^{12} Ohm resistors on mass positions 36–39 and a 10^{11} Ohm resistor on mass position 40. Typical blank levels are 2.5×10^{-16} mol ^{40}Ar and 8.1×10^{-18} mol ^{36}Ar . Measurement time was 7.5 min per step acquiring 45 scans at 10 seconds integration time each. Mass bias was corrected assuming linear mass dependent fractionation and using an atmospheric $^{40}\text{Ar}/^{36}\text{Ar}$ ratio of 295.5. Raw data reduction employed an in-house developed Matlab toolbox; isochron and plateau ages were calculated using Isoplot 3.70 (Ludwig, 2008). Ages were calculated against Fish Canyon Tuff sanidine (FCT) as flux monitor (28.03 ± 0.08 Ma; Jourdan and Renne, 2007). Corrections for interfering Ar isotopes were done using $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.000270$, $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.000699$, $(^{38}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.01211$, $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.00183$ and applying 5% uncertainty. Repeatedly measured HDB1 biotite, irradiated in several batches along with FCT and unknowns, yielded an average age of 24.68 Ma at an external reproducibility better 0.9% (1σ , $n = 5$; see Pfänder et al., 2014). Complete step-heating data and age spectra are presented in the Electronic Supplement (Table DR2) and Figure 8, respectively. A summary of the $^{40}\text{Ar}/^{39}\text{Ar}$ data is provided in Table 2.

APATITE FISSION-TRACK ANALYSIS

We determined single grain apatite fission-track (AFT) ages using the external detector method (Gleadow, 1981) and the zeta approach (Fleischer et al., 1975; Hurford and Green, 1983). Fossil tracks were revealed by etching in 5.5N HNO_3 at 20° for 21 s. After irradiation, induced tracks were revealed in muscovite external detectors by etching in 43% HF for 30 min at ambient temperature. We dated only those grains mounted in the plane of the c-axis at a magnification of $800 \times$ using raster subsets inside grains. For analysis of detrital samples, single grain ages originating from a variety of source areas have to be considered, if the samples did not reach the partial annealing zone (PAZ) after sedimentation. We used binomial peak fitting (Brandon, 1992), whereby age populations are estimated based on binomial functions, which are known to represent one single age distribution of AFT dating relatively well (Garver et al., 1999). Although we neither have low track counts (Bardsley, 1984) nor very young ages, the results from peak fitting have to be judged cautiously.

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TABLE DR1. U-Th-Pb GEOCHRONOLOGY OF THE CENTRAL AND WESTERN TIAN SHAN

Unit, rock type	Age [Ma]	Error (95%)	Quality 1–4	Method and mineral	Reference†	Sample number	Comment
Issyk-Kul block							
Aktyuz, granite	414.0	7.0	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, Journal of Asian Earth Sciences 42, p.821-838	320000	
Akkulen, syenite	292.0	1.0	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, Journal of Asian Earth Sciences 42, p.821-838	340002	
Orto-Koi-Suu valley, granite	430.9	5.8	2	SHRIMP U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	TS-08	
Orto-Koi-Suu valley, granite	444.8	7.0	1	SHRIMP U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	TS-12	
Malaya Almatinka river, granite	420.2	6	2	SHRIMP U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	ALMA3-02	
East of Kochkor, migmatitic granite	1085.0	11.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-51	discordia, upper intercept
East of Kochkor, foliated quartz monzonite	1045.0	7.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-52	
East of Kochkor, granite	1101.0	5.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-53	discordia, upper intercept
East of Kochkor, augen-gneiss	1153.0	4.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-14	
East of Kochkor, migmatitic augen-gneiss	1151.0	13.0	3	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-55	discordia,upper intercept
East of Kochkor, diorite	461.0	4.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-13	
East of Kochkor, diorite	451.0	5.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-15	
G. Karatau Range – Kyrgyz Range, granodiorite	292.0	5.0	1	SHRIMP U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	IK-02	
Karadzhorgo Range, Dolon pass, dolerite	516.0	7.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	IK-06	
Ekurgenkol complex, metadacite	1186.0	6.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	Ki-679	
Ekurgenkol complex, rhyolite	1373.0	5.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-132	
South of Kochkor, granodiorite	441.0	6.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-16	
North bank of Chu River, granitoid gneiss	844.0	9.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG1	
North bank of Chu River, migmatitic granitoid gneiss	810.0	4.2	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG2	
West bank of Chu River, foliated tonalitic gneiss	810.0	10.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG11	discordia, upper intercept
Taldybulak River, migmatitic paragneiss	503.0	8.0	3	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG33	
Kichi-Kemin River, migmatite	799.0	6.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG36	
North bank of Chon-Kemin River, granitoid gneiss	814.0	5.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG43	
Kichi-Kemin River, granitoid gneiss	562.0	7.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG3	
Kichi-Kemin River, leucogneiss	834.0	8.0	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG5	
Kichi-Kemin River, granitoid gneiss	540.8	3.1	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG39	
Kichi-Kemin River, mylonitic granite gneiss	778.0	6.0	3	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG46	
Kichi-Kemin River, leucogabbro	320.9	4.1	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG42	
Kichi-Kemin River, foliated metagabbro	531.2	3.7	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG47	
Kichi-Kemin River, foliated granodiorite/ quartz diorite	471.9	3.5	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG37	
Kichi-Kemin River, unfoliated granodiorite/ quartz diorite	472.0	3.1	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG38	
west of Cholok, porphyritic basaltic andesite	448.9	5.6	3	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG44	discordia, upper intercept
Eastern termination of Kyrgyz Ridge, rhyolite	451.9	4.6	2	SHRIMP U/Pb zircon	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG49	
Ekurgenkol complex, strongly deformed metadacite	1139.0	15.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-139	discordia, upper intercept
Barskoon village, diorite	451.9	3.7	1	LA-ICP-MS U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	KYR-35	
Tashtarata peak, granite	456.4	7.7	2	LA-ICP-MS U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	AI-04	
Song-Kul Range, diorite	502.7	9.2	3	LA-ICP-MS U/Pb zircon	DeGrave et al., 2011, Gondwana Research 20, p. 745-763	AI97	
Song-Kul Range, diorite	498.3	5.8	3	LA-ICP-MS U/Pb zircon	DeGrave et al., 2011, Gondwana Research 20, p. 745-763	AI98	
Song-Kul Range, diorite	453.6	7.2	3	LA-ICP-MS U/Pb zircon	DeGrave et al., 2011, Gondwana Research 20, p. 745-763	AI100	
Sandyk Range, lamprophyre	263.1	3.9	3	LA-ICP-MS U/Pb zircon	DeGrave et al., 2011, Gondwana Research 20, p. 745-763	AI92	
Sjugete village, quartz diorite	442.0	7.4	2	LA-ICP-MS U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	KAZ-03	
Kokomeren River, foliated quartz diorite	1147.0	7.0	3	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-31	
Kokomeren River, granite	1129.0	0.3	3	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-70	
G. Sarkamysh Range, near Sary-Buluk, granite	446.0	7.0	1	SHRIMP U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-17	
Dzhumgal-Tau Range, near Koziomkul, granite	443.0	8.0	1	SHRIMP U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-21	
Kyrgyz Range, down Tyuz-Ashu pas, granite	465.0	6.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	Kyr-03	
Talass-Alatau Range – Susamyr-Tau Range, granodiorite	462.0	7.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-06	
Talass-Alatau Range – Susamyr-Tau Range, granodiorite	452.0	10.0	1	SHRIMP U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-13	discordia, lower intercept
Talass-Alatau Range – Susamyr-Tau Range, granite	482.0	8.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-04	
Makbal metamorphic complex, eclogite	498.0	7.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2012, Gondwana Research 20, p.300-309	18	metamorphic overprint
Makbal metamorphic complex, garnet-talk-chloritoid schist	502.0	10.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2012, Gondwana Research 20, p.300-309	29	metamorphic overprint
Makbal metamorphic complex, granodiorite	514.0	5.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2012, Gondwana Research 20, p.300-309	20	metamorphic overprint
Northwest of Talas, pyroclastic metadacite	1102.0	7.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-81	
Northwest of Talas, weakly foliated granite	1094.0	8.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-82	
Northwest of Talas, biotite granite	1131.0	4.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	D-9035	
Northeast of Talas, granite	1131.0	4.0	2	SHRIMP, Pb/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	T5-140	
Kurgan, tuff	831.0	15.0	2	LA-ICP-MS U/Pb zircon	Levashova et al., 2010, Precambrian Research 185 (1-2), p. 37-54	K-2006-2	
Chiganak, arc-related granodiorite	766.0	7.0	3	LA-ICP-MS U/Pb zircon	Levashova et al., 2010, Precambrian Research 185 (1-2), p. 37-54	K-2006-4	
Chiganak, metadacite	480.0	1.9	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ39	mean of 3 grains
Komkarty River, ophiilitic plagiogranite	477.7	1.1	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ42	mean of 5 grains
NW of Aschisus, metadacite	512.6	1.0	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ33	mean of 4 grains
	534.0	7.0	3	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ20	discordia, lower intercept

Koyandaisi River, granite-gneiss	2791.0	24.0	3	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ19	dicordia, upper intercept
Aschisii, gneissic granite	741.5	0.7	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ22	mean of 6 grains
Serektas River, granite-gneiss	1789.1	0.6	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ12	mean of 4 grains
Uzunbulak river, felsic gneiss	2187.1	0.5	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ18	mean of 4 grains
Yeshlilikurda, porphyritic metarhyolite	775.9	0.8	2	SHRIMP Pb/Pb zircon	Kröner et al., 2007, Geological Society of America Memoir 200, p. 181-209	KZ1	mean of 4 grains
Suek, granite	462.0		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	6072	single grain age
Kara-Kudschar, dacite	1090.0		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	679	single grain age
Tzon-Bylety, plagiogranite	626.0		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	8039-1	single grain age
Beltapschi, tonalite	484		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	9021	single grain age
Beltapschi, tonalite	473		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	9047	single grain age
Tzong-Aktash, granodiorite	501		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	5068	single grain age
Kara-Kudschar, monzonite	481		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	546	single grain age
Itchke-Ter, granite	466		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	340	single grain age
As-Kyr, granite	459		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	564	single grain age
Kara-Kudschar, granodiorite	440		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	2138	single grain age
Beltapschi, granodiorite	435		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	445	single grain age
Karadschorg, granite	435		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	96	single grain age
Karadschorg, granodiorite	438		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	803	single grain age
Bulak, granodiorite	444		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	VIII	single grain age
Koksa, granodiorite	434		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	XXXVII	single grain age
Itchke-Ter, granite	458		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	7408	single grain age
Burchan, granite	467		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	10655	single grain age
Burchan, granite	409		3	TIMS Pb/Pb zircon	Mikolaichuk et al., 1997, Geotektonika 31(6), p. 16-34	10214-1	single grain age
Tuyon County, xenoliths in basalt	707	36	3	LA-ICP-MS Pb/Pb zircon	Zheng et al., 2006, Precambrian Research 145, p. 159-181	Ty61	discordia, upper intercept
Chon-Ashu complex, deformed gabbro	522	4	2	SHRIMP U/Pb zircon	Konopelko et al., 2014, Ore Geology Review, 61, p. 175-191	416200	
Chon-Ashu complex, leucosyenite dike	661	7	2	SHRIMP U/Pb zircon	Konopelko et al., 2014, Ore Geology Review, 61, p. 175-191	416306	
Chon-Ashu complex, syenite	654	11	2	SHRIMP U/Pb zircon	Konopelko et al., 2014, Ore Geology Review, 61, p. 175-191	416307	
Chon-Ashu complex, syenite	656	4	1	SHRIMP U/Pb zircon	Konopelko et al., 2014, Ore Geology Review, 61, p. 175-191	417001	
Chon-Ashu complex, gneissic granite	678	9	2	SHRIMP U/Pb zircon	Konopelko et al., 2014, Ore Geology Review, 61, p. 175-191	416301	
North East Tian Shan							
Makbal metamorphic complex, eclogite	509.0	7.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2012, Gondwana Research 20, p.300-309	17	metamorphic overprint
North-Yili Block Granite Belt, biotite monzo-diorite	371.3	1.5	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	WQ2	
North-Yili Block Granite Belt, biotite diorite	281.2	1.2	3	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK11	
North-Yili Block Granite Belt, biotite granite	296.6	0.8	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK13	
North-Yili Block Granite Belt, biotite granodiorite	412.6	2.4	2	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK14	
South-Yili Block Granite Belt, alkali feldspar granite	430.0	8.0	2	SHRIMP U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	QK7	
Kekesai intrusion, monzogranite	305.5	1.1	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Lithos 146-147, p. 65-79	KKS-35	
Kekesai intrusion, granodioritic porphyry	288.7	1.5	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Lithos 146-147, p. 65-79	KKS-20	
Wenquan area, monzodiorite	450.0	9.0	2	SHRIMP U/Pb zircon	Wang et al., 2012, Journal of Asian Earth Sciences 49, p. 40-53	07-1a	
Wenquan area, gabbro enclave	462.0	5.0	2	SHRIMP U/Pb zircon	Wang et al., 2012, Journal of Asian Earth Sciences 49, p. 40-53	07-1b	
Wenquan area, porphyritic diorite	466.0	4.0	2	SHRIMP U/Pb zircon	Wang et al., 2012, Journal of Asian Earth Sciences 49, p. 40-53	07-1c	
Wenquan area, deformed diorite	447.0	6.0	2	SHRIMP U/Pb zircon	Wang et al., 2012, Journal of Asian Earth Sciences 49, p. 40-53	07-8d	
Wenquan area, amphibolite	455.1	2.7	2	SHRIMP U/Pb zircon	Hu et al., 2008, Acta Petrologica Sinica 24(12), p. 2731-2740	02XW-04b	
Wenquan area, amphibolite	451.4	5.4	1	SHRIMP U/Pb zircon	Hu et al., 2008, Acta Petrologica Sinica 24(12), p. 2731-2740	02XW-20a	
Zhibo ore deposit, granite	318.9	1.5	1	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Gondwana Research 22, p. 585-596	0939	
Zhibo ore deposit, granite	304.1	1.8	1	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Gondwana Research 22, p. 585-596	0947	
Zhibo ore deposit, granite dike	320.3	2.5	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Gondwana Research 22, p. 585-596	0941	
Zhibo ore deposit, granite dike	294.5	1.6	1	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Gondwana Research 22, p. 585-596	0943	
Awulale, Mosiazaote, adakite	259.5	0.5	2	LA-ICP-MS U/Pb zircon	Zhao et al., 2008, Lithos 102, p. 374-391	xt104/xt105	
Yukeke, rhyolite	299.0	6.0	3	SHRIMP U/Pb zircon	Chen et al., 2007, Acta Petrologica Sinica 23(7), p. 1756-1764	1642-1	
Wulasitai, granodiorite	300.0	5.0	2	SHRIMP U/Pb zircon	Chen et al., 2007, Acta Petrologica Sinica 23(7), p. 1756-1764	1624-2	
Xia'er'aola, porphyritic monogranite	294.0	4.0	2	SHRIMP U/Pb zircon	Chen et al., 2007, Acta Petrologica Sinica 23(7), p. 1756-1764	1702	
Lailisigao'er Cu-Mo-deposit, granodiorite	362.0	12.0	3	SHRIMP U/Pb zircon	Li et al., 2006, Acta Petrologica Sinica 22(10), p. 2437-2443	LR	
Alataw mts., granite	298.4	5.7	2	LA-ICP-MS U/Pb zircon	Liu et al., 2005, Acta Petrologica Sinica 21(3), p. 623-639	KWSY7	
Alataw mts., granite	292.4	4.9	2	LA-ICP-MS U/Pb zircon	Liu et al., 2005, Acta Petrologica Sinica 21(3), p. 623-639	KWSY26	
Alataw mts., rhyolite	270.7	6.5	1	LA-ICP-MS U/Pb zircon	Liu et al., 2005, Acta Petrologica Sinica 21(3), p. 623-639	KWSY16	
Taerbieke gold deposit, andesite	347.2	1.6	2	LA-ICP-MS U/Pb zircon	Tang et al., 2009, Acta Petrologica Sinica 25(6), p. 1341-1352	06XJ31	
Borohoro, gabbro diorite	301.0	7.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(8), p. 1885-1900	XJ626-1	
Borohoro, biotite granite	294.0	7.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(8), p. 1885-1900	XJ701	
Borohoro, biotite K-granite	280.0	5.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(8), p. 1885-1900	XJ702	
Borohoro, biotite K-granite	266.0	6.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(8), p. 1885-1900	XJ695	
Borohoro, biotite granite	285.3	7.3	3	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(8), p. 1885-1900	XJ694	
Dabate copper deposit, granitic porphyry	288.9	2.3	3	LA-ICP-MS U/Pb zircon	Tang et al., 2008, Acta Petrologica Sinica 24(5), p. 947-958	06XJ-013	
Axi gold deposit, quartz andesite	363.2	5.7	1	SHRIMP U/Pb zircon	Zhai et al., 2006, Acta Petrologica Sinica 22(5), p. 1399-1404	04A5	

Lailisgao'er Cu-Mo-deposit, monzodioritic porphyry	354.0	0.7	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2009, Acta Petrologica Sinica 25(6), p. 1319-1331	D7
Lailisgao'er Cu-Mo-deposit, monzodioritic porphyry	364.0	1.2	3	LA-ICP-MS U/Pb zircon	Zhang et al., 2009, Acta Petrologica Sinica 25(6), p. 1319-1331	D14
Keersai, Bole city, granite-diorite porphyry	317.0	6.0	3	SHRIMP U/Pb zircon	Zhang et al., 2008, Xinjiang Geology 26(4), p. 340-342	TW-100
Central Tien Shan Granite Belt, hornblende granodiorite	437.4	1.1	3	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	XT17
Central Tien Shan Granite Belt, diorite	409.0	1.6	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	AK8
Central Tien Shan Granite Belt, monzodiorite	325.0	5.0	1	SHRIMP U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	QK1
Central Tien Shan Granite Belt, biotite granite	322.0	5.0	1	SHRIMP U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	QK5
Central Tien Shan Granite Belt, granitic mylonite	341.5	0.9	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK24
Central Tien Shan Granite Belt, biotite diorite	320.8	1.1	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK29
Central Tien Shan Granite Belt, granitic gneiss	895.6	2.4	2	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	DK28
Xiate, basalt	516.3	7.4	1	SHRIMP U/Pb zircon	Qian et al., 2009, International Journal of Earth Sciences 98, p. 551-569	DV 44-3
Xiate, diorite	470.0	12.0	1	SHRIMP U/Pb zircon	Qian et al., 2009, International Journal of Earth Sciences 98, p. 551-569	DV 49-5
Jingbulake intrusion, diorite	430.5	5.9	2	SHRIMP U/Pb zircon	Yang and Zhou, 2009, Lithos 113, p. 259-273	QB1-196
Yuximolegai, quartz syenite porphyry	310.8	2.1	1	SIMS U/Pb zircon	Yang et al., 2012, Gondwana Research 22, p. 325-340	YX8-1
Yuximolegai, quartz syenite porphyry	284.4	4.4	3	LA-ICP-MS U/Pb zircon	Yang et al., 2012, Gondwana Research 22, p. 325-340	YXQ
granitic gneiss	798.0	0.0	4	?TIMS U/Pb zircon	Chen et al., 1999, Geochimica 28(6), p. 515-520	966056
Laerd Daban, K-feldspar granite	457.0	27.0	4	?TIMS U/Pb zircon	Han et al., 2004, Xinjiang Geology 22(1), p. 4-11	97LRD-7
Haxilegen peak, biotite granite	286.8	0.8	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-58
Guozigou of Huocheng County, amphibole-granite	351.9	1.6	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-106
Zhaos coal mine, granodiorite	348.4	0.8	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-96
Zeketai of Xinyuan County, amphibole gabbro	308.2	1.2	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-95
Nalati area, granitoid	426.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	ZS2-3
Nalati area, granitoid	407.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	KK3-1
Nalati area, granitoid	352.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	KK4-1
Nalati area, granitoid	349.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	TL2-7
Nalati area, granitoid	320.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	XXY2-1
Nalati area, granitoid	485.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	ZS1-1
Nalati mountain, S of Xinyuan County,	353.7	4.5	2	SHRIMP U/Pb zircon	Zhou et al., 2005, Chinese Science Bulletin 50(19), p. 2201-2212	TS01
Nalati mountain, N of Laerdudaban,	312.8	4.2	2	SHRIMP U/Pb zircon	Zhou et al., 2005, Chinese Science Bulletin 50(19), p. 2201-2212	TS02
Kekesu River, biotite granite	352.0	5.0	1	LA-ICP-MS U/Pb zircon	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	KKS10
Kekesu River, hbl granite	349.0	6.0	2	LA-ICP-MS U/Pb zircon	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	KKS12
Kekesu-Qiongkushitai section, K-granite	341.0	6.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ604
Awulake Mountains, syenite	311.9	2.5	2	SHRIMP U/Pb zircon	Sun et al., 2008, Gondwana Research 14, p. 383-394	04XJ-263
Lamasu, granodiorite porphyry	366.0	3.0	2	LA-ICP-MS U/Pb zircon	Tang et al., 2010, Lithos 119, p. 393-411	06XJ017
Dabate, dacite	316.0	4.0	3	LA-ICP-MS U/Pb zircon	Tang et al., 2010, Lithos 119, p. 393-411	06XJ04
Dabate, granite porphyry	289.0	3.0	3	LA-ICP-MS U/Pb zircon	Tang et al., 2010, Lithos 119, p. 393-411	06XJ013
Borohoro, granodiorite	294.0	7.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	B101
Borohoro, granodiorite	272.8	6.0	3	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	B94
Borohoro, K-granite	266.0	6.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	B95
Borohoro, K-granite	180.0	5.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	B102
Dabate copper-molybdenum deposit, granite porphyry	278.7	5.7	2	SHRIMP U/Pb zircon	Zhang et al., 2008, Acta Geologica Sinica 82 (11), p. 1494-1503	DBT-05-13
Dabate copper-molybdenum deposit, rhyolitic porphyry	315.9	5.9	1	SHRIMP U/Pb zircon	Zhang et al., 2008, Acta Geologica Sinica 82 (11), p. 1494-1503	DBT-05-13
Tekesdaban, basaltic andesite	361.0	5.9	2	SHRIMP U/Pb zircon	Zhu et al., 2009, Journal of the Geological Society 166, p. 1085-1099	TS08
Xinjiao, basaltic rock	358.2	3.7	2	SHRIMP U/Pb zircon	Zhu et al., 2009, Journal of the Geological Society 166, p. 1085-1099	TS069
Xinjiao, basaltic rock	352.0	3.2	3	SHRIMP U/Pb zircon	Zhu et al., 2009, Journal of the Geological Society 166, p. 1085-1099	TS01
Yuximolegai, rhyolite	316.0	2.5	2	SHRIMP U/Pb zircon	Zhu et al., 2009, Journal of the Geological Society 166, p. 1085-1099	TS1618
Laerdudaban, andesite	324.0	4.9	3	SHRIMP U/Pb zircon	Zhu et al., 2009, Journal of the Geological Society 166, p. 1085-1099	TS04
Yuximolegai, quartz diorite	309.9	2.7	1	SIMS U/Pb zircon	Niu et al., 2010, Acta Petrologica Sinica 26(10), p. 2035-2045	YX8-1
Lamasi, plagioclase granite	390.5	7.7	2	SHRIMP U/Pb zircon	Zhang et al., 2008, Acta Geologica Sinica 82(4), p. 731-740	L54
Mosizaoete, adakite	259.5	0.5	4	LA-ICP-MS U/Pb zircon	Zha et al., 2009, Gondwana Research 16, p. 216-226	6
Wenquan, granitic gneiss	919.0	6.0	1	SHRIMP U/Pb zircon	Hu et al., 2010, Geochimica 39(3), p. 197-212	02XW-11a
Wenquan, granitic gneiss	904.0	13.0	3	SHRIMP U/Pb zircon	Hu et al., 2010, Geochimica 39(3), p. 197-212	881073-1
Middle Tian Shan Block						
Terekti, diorite	294.0	5.3	1	SHRIMP U/Pb zircon	Konopelko et al., 2009, Ore Geology Reviews 35, p.206-216	416506
Inylchek (Lesisty), granite	295.3	4.4	2	SHRIMP U/Pb zircon	Konopelko et al., 2009, Ore Geology Reviews 35, p.206-216	416801
Maidal'adir, granite	288.6	6.3	2	SHRIMP U/Pb zircon	Konopelko et al., 2009, Ore Geology Reviews 35, p.206-216	416803
Kekezu, K-granite	277.0	3.0	1	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	KKS5
Kekezu river, K-feldspar granite	274.5	0.0	4	SHRIMP U/Pb zircon	Gao et al., 2006, Acta petrologica sinica 22, p. 1049-1061	TK4-7,9
Changawuzi pluton, Muzhaerte River, gneissic porphyritic tonalite	333.0	3.0	2	SHRIMP U/Pb zircon	Gou et al., 2012, Lithos 136-139, p. 201-224	W8037
Changawuzi pluton, Muzhaerte River, gneissic granodiorite	326.0	3.0	2	SHRIMP U/Pb zircon	Gou et al., 2012, Lithos 136-139, p. 201-224	W8028
Alasan pluton, Muzhaerte River, granodiorite	293.0	3.0	1	LA-ICP-MS U/Pb zircon	Gou et al., 2012, Lithos 136-139, p. 201-224	W8027
Uch-Koshkon, leucogranite	294.0	2.2	1	LA-ICP-MS U/Pb zircon	Konopelko et al., 2007, Lithos 97, p.140-160	206801
Changawuzi ophiolite complex, rodingite (in serpentinite)	279.0	8.1	4	SIMS U/Pb zircon	Li et al., 2010, Lithos 118, p.17-34	302-6
	422.0	10.0	2	SHRIMP U/Pb zircon	zircon rims	
					most concordant U/Pb age	

Changawuzi ophiolite complex, rodingite (in serpentinite)	291.0	15.0	3	SHRIMP U/Pb zircon	Li et al., 2010, Lithos 118, p. 17-34	302-6	hydrothermal zircons
Western Tien Shan HP-UHP-belt, eclogite	306.0	13.0	4	SIMS U/Pb rutile	Li et al., 2011, Lithos 122, p.76-86	TS193	discordia age, lower intercept
Western Tien Shan HP-UHP-belt, eclogite	321.0	14.0	4	SIMS U/Pb rutile	Li et al., 2011, Lithos 122, p.76-86	ZS3	discordia age, lower intercept
Western Tien Shan HP-UHP-belt, eclogite	320.0	14.0	4	SIMS U/Pb rutile	Li et al., 2011, Lithos 122, p.76-86	07RU3	discordia age, lower intercept
Western Tien Shan HP-UHP-belt, eclogite	226.3	4.6	2	SHRIMP U/Pb zircon	Zhang et al., 2007, Lithos 96, p. 266-280	1067	
Western Tien Shan HP-UHP-belt, eclogite	234.0	6.0	3	SHRIMP U/Pb zircon	Zhang et al., 2007, Lithos 96, p. 266-280	106	
Western Tien Shan HP-UHP-belt, eclogite	310.0	6.0	2	SHRIMP U/Pb zircon	Zhang et al., 2007, Lithos 96, p. 266-280	629	
Western Tien Shan HP-UHP-belt, eclogite	310.0	5.0	2	SHRIMP U/Pb zircon	Zhang et al., 2007, Lithos 96, p. 266-280	841	
Western Tien Shan HP-UHP-belt, omphacite-garnet-phengite schist	233.0	4.0	2	SHRIMP U/Pb zircon	Zhang et al., 2007, Lithos 96, p. 266-280	111	lower intercept of discordia
Central Tien Shan Granite Belt, hornblende granodiorite	247.2	0.9	1	LA-ICP-MS U/Pb zircon	Long et al., 2011, Lithos 126, p. 321-340	XT18	
Bindaban pass, granitic gneiss	969.0	11.0	3	SHRIMP U/Pb zircon	Yang et al., 2008, Acta Geologica Sinica 82, p. 117-125	X054-3	
Bingdaban, granitic gneiss	926.0	8.0	3	?TIMS U/Pb zircon	Chen et al., 2009, Geochimica 38(5), p. 424-431	04XI-2	
Muzhaerte, granitic gneiss	707.0	13.0	4	?TIMS U/Pb zircon	Chen et al., 2000, Acta Petrologica Sinica 16, p.91-98	966007	
Baluntai, granite	456.2	0.5	4	?TIMS U/Pb zircon	Han et al., 2004, Xinjiang Geology 22(1), p. 4-11	97BLT-2	
Gangou area, granite	428.0	10.0	3	SHRIMP U/Pb zircon	Shi et al., 2007, Chinese Science Bulletin 52(11), p. 1507-1516	XGG1	
Gangou area, granite	368.0	10.0	3	SHRIMP U/Pb zircon	Shi et al., 2007, Chinese Science Bulletin 52(11), p. 1507-1516	XGG2	
Gangou area, granite	361.0	11.0	3	SHRIMP U/Pb zircon	Shi et al., 2007, Chinese Science Bulletin 52(11), p. 1507-1516	XGG3	
Gangou area, granite	368.0	9.0	3	SHRIMP U/Pb zircon	Shi et al., 2007, Chinese Science Bulletin 52(11), p. 1507-1516	XGG8	
southern part of Tekexun, quartz diorite	328.3	2.3	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-137	youngest concordant age
Bayinbuluke area, quartz-bearing gabbro	446.8	1.2	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	03T-64	youngest concordant age
Nalati area, granitoid	432.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	KK1-1	peak age
Nalati area, granitoid	430.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	XXY1-1	peak age
Nalati area, granitoid	366.0	0.0	4	LA-ICP-MS U/Pb zircon	Xu et al., 2010, Acta Petrologica et Mineralogica 29(6), p. 691-706	TL1-2	peak age
Kumux, deformed granite	396.0	4.0	2	SHRIMP U/Pb zircon	Yang and Wang, 2006, Acta Petrologica et Mineralogica 25(5), p. 401-411	X107	
Bikai River, granite	478.7	1.8	2	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	BK7	
Bikai River, granite	401.1	1.2	3	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	BK13	
Bikai River, granite	412.6	1.2	2	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	BK14	
Bikai River, granite	419.0	1.8	2	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	BK15	
Kekesu River, quartz syenite	281.1	8.7	4	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	KKS1	
Kekesu River, diorite	433.0	6.0	1	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	KKS3	
Kekesu River, diorite	398.3	1.1	1	LA-ICP-MS U/Pb zircon/SHRIMP	Gao et al., 2009, International Journal of Earth Sciences 98, 1221-1238	KKS5	
Kekesu-Qiongkushitai section, biotite granodiorite	313.0	4.0	1	LA-ICP-MS U/Pb zircon/SHRIMP	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ620	
Kekesu-Qiongkushitai section, K-granite	338.0	8.0	2	LA-ICP-MS U/Pb zircon/SHRIMP	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ676	
HP-LT belt, granite dike	284.9	2.0	1	SIMS U/Pb zircon	Gao et al., 2011, Tectonophysics 499, p. 118-131	TGLS8	
Baluntai, granitoid gneiss	407.6	5.3	3	SHRIMP U/Pb zircon	Yang et al., 2006, Acta Petrologica Sinica 22(1), 41-48	D02054	
Baluntai, granitoid gneiss	416.6	5.6	3	SHRIMP U/Pb zircon	Yang et al., 2006, Acta Petrologica Sinica 22(1), 41-48	D02062	
Kichy-Naryn, diorite	435.0	3.4	1	SHRIMP U/Pb zircon	Konopelko et al., 2008, Journal of Asian Earth Sciences 32, p.131-141	412200	
Kichy-Naryn, granite	437.0	3.2	1	SHRIMP U/Pb zircon	Konopelko et al., 2008, Journal of Asian Earth Sciences 32, p.131-141	412600	
Kichy-Naryn, diorite-pebbles	466.0	10.0	1	SHRIMP U/Pb zircon	Konopelko et al., 2008, Journal of Asian Earth Sciences 32, p.131-141	4131000 & 4131001	
Kokshaal range, Ulan, granite	303.0	3.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	217001	
Gangou, biotite granite	252.0	4.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2009, International Journal of Earth Sciences 98, p. 1275-1298	KMX13	
Bauralabs Range, granite	291.0	3.9	3	LA-ICP-MS U/Pb zircon	DeGrave et al., 2011, Gondwana Research 20, p. 745-763	Kyr19	
Kumishi, Central Tien Shan, granite	417.0	5.7	3	LA-ICP-MS U/Pb zircon	Dong et al., 2011, Gondwana Research 20, p.568-581	kms-15	intercept age, discordia
Kumishi, Central Tien Shan, granite	402.0	3.4	3	LA-ICP-MS U/Pb zircon	Dong et al., 2011, Gondwana Research 20, p.568-581	kms-22	intercept age, discordia
Kumishi, Central Tien Shan, granite	411.0	4.7	3	LA-ICP-MS U/Pb zircon	Dong et al., 2011, Gondwana Research 20, p.568-581	kms-25	intercept age, discordia
Kumishi, Central Tien Shan, granite	293.0	3.0	3	LA-ICP-MS U/Pb zircon/SHRIMP	Dong et al., 2011, Gondwana Research 20, p.568-581	kms-47	intercept age, discordia
East of TFF, Makmal, granite	286.0	5.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	320100	
Terekty, granite	291.0	5.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2009, Ore Geology Reviews 35, p.206-216	416000	
Tashkoro, granite	299.0	4.0	2	SHRIMP U/Pb zircon	Konopelko et al., 2009, Ore Geology Reviews 35, p.206-216	416705	
Sheardelan metamorphic core complex, mylonitized granite	921.7	8.1	2	SHRIMP U/Pb zircon	Su et al., 2008, Acta Petrologica Sinica 24(12), p. 2789-2799	sample1	
Kanggur gold deposit, tonalite	275	7.0	3	U/Pb zircon	Zhang et al., 2002, Resource Geology 52(3), p. 249-261	KG-1	
Tianger area, mylonitized granite	403.7	5.6	2	SHRIMP U/Pb zircon	Zhu et al., 2011, Ore Geology Reviews 40, p. 108-121	TS06	
Tianger area, mylonitized granite	443.4	3.3	3	SHRIMP U/Pb zircon	Zhu et al., 2011, Ore Geology Reviews 40, p. 108-121	TS277	
Kekesu/Qiongkushitai section, granodiorite	313	4.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ620	
Kekesu/Qiongkushitai section, granite	341	6.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ604	
Kekesu/Qiongkushitai section, granite	338	8.0	3	LA-ICP-MS U/Pb zircon	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ676	
Sary-Dzhaz Range, near Kiuliu village	1087	290.0	3	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-20	discordia, lower intercept
Sary-Dzhaz Range, near Kiuliu village	2270	90.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-20	discordia, upper intercept
Aksairak Range, Arabel pass	842	16.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-31	
Aksairak Range, Arabel pass	2057	55.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-31	
Sary-Dzhaz Range, near Inylchek village	831	6.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-15	
Aksairak Range, Kara Sai valley	806	20.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-29	
Aksairak Range, Kara Sai valley	1866	42.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-29	
Atbashi metamorphic complex	788	26.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-62	
Kembel massif, near At-Talaq village	417	5.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-71	

Kembel massif, near At-Talaq village	410	4.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-73	
Terektnsky complex, near Inylchek village	302	6.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-13	
Terektnsky complex, near Inylchek village	438	13.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-13	
Terektnsky complex, near Inylchek village	295	15.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-12	
Terektnsky complex, near Inylchek village	221	19.0	3	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-12	
Terektnsky complex, near Inylchek village	288	10.0	3	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-11	
Bosogo ophiolite	282	6.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60	
Bosogo ophiolite	428	11.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60	
Bosogo ophiolite	504	28.0	3	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60	
Kichi-Naryn, albrite dyke	1101.0	13.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-135	
Ekurgenkol complex, rhyolite	1365.0	6.0	2	SHRIMP U/Pb zircon	Kröner et al., 2013, Gondwana Research 23, p. 272-295	KG-127	
Kjok-Kia base, granite	434.2	6.5	2	SHRIMP U/Pb zircon	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	IK-12	
east of TFF, Karasu river, foliated pegmatoidal granite	279.0	5.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	26	
east of TFF, Karasu river, foliated pegmatoidal granite	279.0	5.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	27	
Arbashi Range, sheared felsic tuff	461.0	5.0	1	SHRIMP U/Pb zircon	Alexeev et al., 2016, Gondwana Research, doi:10.1016/j.gr.2016.02.003	A13003	
Arbashi Range, sheared rhyolite	460.0	3.0	1	SHRIMP U/Pb zircon	Alexeev et al., 2016, Gondwana Research, doi:10.1016/j.gr.2016.02.003	A13002	
Arbashi Range, sheared rhyolite	436.0	3.0	1	SHRIMP U/Pb zircon	Alexeev et al., 2016, Gondwana Research, doi:10.1016/j.gr.2016.02.003	KG 28	
South Tian Shan collisional belt							
southern margin of the Yili-block, eclogite	319.9	2.7	1	SIMS U/Pb zircon	Su et al., 2010, European Journal of Mineralogy 22, p. 473-478	071-6a	
southern margin of the Yili-block, eclogite	319.8	3.1	1	SIMS U/Pb zircon	Su et al., 2010, European Journal of Mineralogy 22, p. 473-478	071-8a	
Laerdun Daban, granitic gneiss	948.0	8.0	2	SHRIMP U/Pb zircon	Chen et al., 2009, Geochimica 38(5), p. 424-431	04XJ-216	
Aketaxi, gneissic granite	457.4	1.8	4	TIMS U/Pb zircon	Han et al., 2004, Xinjiang Geology 22(1), p. 4-11	YYG13-2	
south of Kuergan along Duku highway	426.3	1.9	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	02T-18	
south of Kuergan along Duku highway	425.2	1.8	4	TIMS U/Pb zircon	Xu et al., 2006, Northwestern Geology 39(1), p. 50-75	02T-19	
Mangqisi region, granite	296.9	5.4	2	SHRIMP U/Pb zircon	Zhu et al., 2008, Acta Petrologica Sinica 24(12), p. 2761-2766	ST06-6	
Mangqisi region, granite	304.2	11.2	3	SHRIMP U/Pb zircon	Zhu et al., 2008, Acta Petrologica Sinica 24(12), p. 2761-2766	ST06-4	
Kumishi, Huangjianshan, granite	423.0	16.0	3	TIMS U/Pb zircon	Zhang et al., 2007, Acta Petrologica Sinica 23(8), p. 1821-1829	DYCWL-4	
Chuanwulu complex, biotite diorite	287.8	4.3	3	LA-ICP-MS U/Pb zircon	Huang et al., 2012, Lithos 140-141, p. 66-85	DYCWL-3	
Chuanwulu complex, biotite monzonite	286.4	2.5	2	LA-ICP-MS U/Pb zircon	Huang et al., 2012, Lithos 140-141, p. 66-85	209202	
Djangart, granite	296.7	4.2	3	SIMS U/Pb zircon	Mao et al., 2004, Economic Geology 99, p. 1771-1780	HSS6	
Hongshishan intrusion, rhyolite	279.1	2.9	2	SIMS U/Pb zircon	Qin et al., 2011, American Journal of Science 311, p. 237-260	HSS12	
Hongshishan intrusion, diorite	279.7	4.8	2	SIMS U/Pb zircon	Qin et al., 2011, American Journal of Science 311, p. 237-260	PSZK1-2-650	
Poshi intrusion, gabbro	284.0	2.2	1	SIMS U/Pb zircon	Qin et al., 2011, American Journal of Science 311, p. 237-260	BJS-6	
Bijiashan intrusion, gabbro	279.2	2.3	1	SIMS U/Pb zircon	Qin et al., 2011, American Journal of Science 311, p. 237-260	012-2	
Kokshaal range, Suteke, alkaline gabbro	284.0	1.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	215701	
Kokshaal range, Ak-Shiyrap, rapakivi granite	292.0	3.0	2	SHRIMP U/Pb zircon	Seltmann et al., 2011, Journal of Asian Earth Sciences 42, p.821-838	PY	
Poyi intrusion, alkaline granite	251.4	1.8	1	SIMS U/Pb zircon	Su et al., 2011, Gondwana Research 20, p. 516-531	499-11	
Heiyingshan ophiolitic melange, gabbro	392.0	5.0	2	LA-ICP-MS U/Pb zircon	Wang et al., 2011, Tectonophysics 497, p. 85-104	02T-11	
Kulehu ophiolite, gabbro	418.2	2.6	2	LA-ICP-MS U/Pb zircon	Ma et al., 2007, Journal of Northwest University (Natural Science edition) 37(1), p. 107.	01-25	
Yushugou ophiolitic terrane, granulite	392.0	7.0	2	SHRIMP U/Pb zircon	Zhou et al., 2004, Chinese Science Bulletin 49(13), p. 1415-1419	01-26	
Yushugou ophiolitic terrane, granulite	390.0	11.0	2	SHRIMP U/Pb zircon	Zhou et al., 2004, Chinese Science Bulletin 49(13), p. 1415-1419	209202	
Djangart intrusion, granite	296.7	4.2	2	SIMS U/Pb zircon	Konopelko et al. 2007, Lithos 97, p.140-160	T4	
Mydrym, granite, leucogranite	281.4	2.2	3	SIMS U/Pb zircon	Konopelko et al. 2007, Lithos 97, p.140-160	10T66	
Kok-Kiya, leucogranite	278.9	2.7	3	SIMS U/Pb zircon	Konopelko et al. 2007, Lithos 97, p.140-160	10T03	
Korla area, biotite quartz syenite	662.4	3.6	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T08	
Korla area, biotite quartz syenite	662.8	6.9	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T10	
Korla area, biotite syenogranite	627.0	4.8	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T52	
Korla area, biotite syenogranite	628.8	4.7	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T53	
Korla area, biotite quartz syenite	660.8	5.8	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	09T11	
Korla area, K-feldspar granite vein	634.9	3.4	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T19	
Korla area, biotite hornblende gneiss	658.9	3.4	1	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Precambrian Research 212-213, p.117-138	10T25	
Korla area, porphyry granodiorite	420.6	2.3	2	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Lithos 142-143, p. 1-15	TS579	
Korla area, porphyric granodiorite	421.7	2.8	2	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Lithos 142-143, p. 1-15	KL33	
Korla area, porphyric granodiorite	419.8	3.3	2	LA-ICP-MS U/Pb zircon	Ge et al., 2012, Lithos 142-143, p. 1-15	KL35	
Kuluketek, biotite granodiorite	790.0	3.0	2	LA-ICP-MS U/Pb zircon	Long et al., 2011, Precambrian Research 187, p. 1-14	KL38	
Archaean Tuogelakebulake Complex, tonalite	1855.0	14.0	3	SHRIMP U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	08XJ03-1	
Archaean Tuogelakebulake Complex, trondhjemite	1819.0	35.0	3	SHRIMP U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	08XJ03-2	
Archaean Tuogelakebulake Complex, potassic granite	2534.0	19.0	3	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	09TR13	
Xinditage, plagioclase gneiss (schist)	1800.0	19.0	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	09TR14	
Xinditage, felsic pegmatite in plagioclase gneiss (schist)	1807.0	28.0	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	Zhu et al., 2008, Journal of the Geological Society of London 165, p. 887-890	T10
Xinditage, biotite schist	1856.0	12.0	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	Zhu et al., 2008, Journal of the Geological Society of London 165, p. 887-890	T11
Xinditage, biotite-plagioclase gneiss	1864.0	14.0	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	discordia age, upper intercept	
Korla area, spessartite dyke	628.7	6.6	2	SHRIMP U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	discordia age, upper intercept	
Korla area, diabase dyke	652.0	7.4	2	SHRIMP U/Pb zircon	Zhang et al., 2012, Journal of Asian Earth Sciences 47, p. 5-20	discordia age, upper intercept	

Korla area, diabase dyke	642.0	6.8	2	SHRIMP U/Pb zircon	Zhu et al., 2008, Journal of the Geological Society of London 165, p. 887-890	T13
Seriyakelake region, granodiorite	382.1	6.2	1	SHRIMP U/Pb zircon	Zhu et al., 2008, Acta Petrologica Sinica 24(5), p. 971-976	KLH4
Xingdi fault zone, gabbro	2502.0	31.0	2	LA-ICP-MS Pb/Pb zircon	Deng et al., 2008, Acta Petrologica Sinica 24(11), p. 2000-2008	XJ593
Xingdi fault zone, granite	798.0	6.0	1	LA-ICP-MS U/Pb zircon	Deng et al., 2008, Acta Petrologica Sinica 24(11), p. 2000-2008	XJ587
Xingdi fault zone, diabase	813.0	41.0	2	LA-ICP-MS U/Pb zircon	Deng et al., 2008, Acta Petrologica Sinica 24(11), p. 2000-2008	XJ589
Hongshishan, olivine gabbro	281.8	2.6	1	LA-ICP-MS U/Pb zircon	Ao et al., 2010, Gondwana Research 18, p. 466-478	HSS08
Beishan region, rhyolite	279.1	2.9	2	LA-ICP-MS U/Pb zircon	Su et al., 2011, Journal of Asian Earth Sciences 41, p. 31-43	HSS6
Beishan region, diorite	279.7	4.8	3	LA-ICP-MS U/Pb zircon	Su et al., 2011, Journal of Asian Earth Sciences 41, p. 31-43	HSS12
Beishan region, peridotite	321.7	3.4	1	LA-ICP-MS U/Pb zircon	Su et al., 2011, Journal of Asian Earth Sciences 41, p. 31-43	09HSS6
Beishan region, dacite	286.4	2.8	2	SIMS U/Pb zircon	Su et al., 2012, International Geology Review 54 (3), p. 270-289	HS139
Beiyixi volcanic formation, tuff	755.0	15.0	2	SHRIMP U/Pb zircon	Xu et al., 2005, Precambrian Research 136, p.107-123	Xb006
Gelumtagushi, gneissic granite	421.0	11.0	4	U/Pb zircon	Han et al. 2004, Xinjiang Geology 22(1), p. 4-11	G-8
Aiximaiigen, mylonitic granite	490.0	14.0	4	U/Pb zircon	Han et al. 2004, Xinjiang Geology 22(1), p. 4-11	AKTX-2
Heiyingshan plutonite, hornblende biotite granite	285.0	4.0	3	SHRIMP U/Pb zircon	Long et al., 2008, Acta Geologica Sinica 82(2), p. 415-424	HYS-73
Xingxingxia, granitic gneiss	942.0	7.0	2	SHRIMP U/Pb zircon	Hu et al., 2010, Geochimica 39(3), p. 197-212	02XH19b
Bosogo ophiolite	282	6.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60
Bosogo ophiolite	428	11.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60
Bosogo ophiolite	504	28.0	3	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-60
Tashkoro intrusion	307	4.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-16
Torugart intrusion, torugart military post	288	3.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-74
Tashrabat intrusion, Bash-Kioltubek pass	286	4.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-75
Mudryum intrusion, Kokshaal Range	286	4.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-82
Kok-Kiya intrusion, near Kurumdy	283	4.0	1	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-79
Tashrabat intrusion, Bash-Kioltubek pass	282	3.0	2	LA-ICP-MS U/Pb zircon	Glorie et al., 2011, Tectonics 30, TC6016	AI-77
Tuyon County, xenoliths in basalt	767	23	3	LA-ICP-MS Pb/Pb zircon	Zheng et al., 2006, Precambrian Research 145, p. 159-181	Ty67
Tuyon County, xenoliths in basalt	721	47	3	LA-ICP-MS Pb/Pb zircon	Zheng et al., 2006, Precambrian Research 145, p. 159-181	Ty16
Awulale, granulite-facies gneiss	764	72	2	Cameca U/Pb zircon	Li et al., 2009, Geological Bulletin of China 28(12), p. 1852-1862	discordia, upper intercept
Awulale, granulite-facies gneiss	1609	40	2	Cameca U/Pb zircon	Li et al., 2009, Geological Bulletin of China 28(12), p. 1852-1862	discordia, lower intercept
Karakum-Tarim cratons, northern Tarim basin						
Bayingou ophiolite, plagiogranite	324.8	7.1	2	SHRIMP U/Pb zircon	Xu et al., 2005, Geological Review 51(5), p. 523-527	
Kuluketag, quartzdiorite	754.0	4.0	3	LA-ICP-MS U/Pb zircon	Long et al., 2011, Precambrian Research 187, p. 1-14	TS558
Kuluketag, hornblende-biotite granodiorite	785.0	8.0	2	LA-ICP-MS U/Pb zircon	Long et al., 2011, Precambrian Research 187, p. 1-14	TS559
Kuluketag, biotite granite	798.0	3.0	2	LA-ICP-MS U/Pb zircon	Long et al., 2011, Precambrian Research 187, p. 1-14	TS556
Northern Tarim uplift, rhyolite	290.9	4.1	3	LA-ICP-MS U/Pb zircon	Tian et al., 2010, Contrib Mineral Petrol 160, p. 407-425	YM30-1
Northern Tarim uplift, dacite	286.6	3.3	3	LA-ICP-MS U/Pb zircon	Tian et al., 2010, Contrib Mineral Petrol 160, p. 407-425	YM5-8
Northern Tarim uplift, rhyolite	277.3	2.5	2	SHRIMP U/Pb zircon	Tian et al., 2010, Contrib Mineral Petrol 160, p. 407-425	NK1-2
Northern Tarim uplift, rhyolite	282.9	2.5	3	LA-ICP-MS U/Pb zircon	Tian et al., 2010, Contrib Mineral Petrol 160, p. 407-425	YM16-1
Northern Tarim uplift, rhyolite	271.7	2.2	2	LA-ICP-MS U/Pb zircon	Tian et al., 2010, Contrib Mineral Petrol 160, p. 407-425	MN1-1
Bachu, Mazhashan, syenite	285.9	2.6	1	SHRIMP U/Pb zircon	Sun et al., 2008, Journal of Jilin University (Earth Science Edition) 38(1), p. 8-20	04XJ-78
Xiaoheizi, syenite	277.0	4.0	2	SHRIMP U/Pb zircon	Yang et al., 2006, Acta Petrologica Sinica 22(5), p. 1405-1412	XH-13
Tazhong-Bachu region, Kepintag, basalt	275.0	13.0	4	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04-B03
Tazhong-Bachu region, Kepintag, tuff	291.0	10.0	3	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04-B04
Tazhong-Bachu region, Kepintag, gabbro	274.0	15.0	4	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04B-07
Tazhong-Bachu region, Mazhartag, diabase	272.0	6.0	2	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04-B15
Tazhong-Bachu region, Mazhartag, syenite	282.0	3.0	2	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04-B30
Tazhong-Bachu region, Mazhartag, syenite	281.0	4.0	3	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	04-B32
Tazhong-Bachu region, Shun1 well, dacite-porphphy	286.0	4.0	2	LA-ICP-MS U/Pb zircon	Li et al., 2007, Acta Petrologica Sinica 23(5), p. 1097-1107	G-Shun1
Bachu intrusive complex, quartz-syenite	273.7	1.5	2	LA-ICP-MS U/Pb zircon	Zhang et al., 2008, The Journal of Geology 116, p. 269-287	BC03
Bayingou ophiolite, gabbro	344.0	3.4	3	LA-ICP-MS U/Pb zircon	Xu et al., 2006, Acta geologica sinica 80(8), p. 1168-1176	04T-11
Xinger area, Kuluktag, hornblende gneiss	2492.0	19.0	3	U/Pb zircon	Guo et al., 2003, Acta Petrologica Sinica 19(3), p. 537-542	discordia age, upper intercept
Xinger area, Kuluktag, amphibolite	1836.0	25.0	3	U/Pb zircon	Guo et al., 2003, Acta Petrologica Sinica 19(3), p. 537-542	discordia age, upper intercept
Xinger area, Kuluktag, grey gneiss	2337.0	6.0	3	U/Pb zircon	Guo et al., 2003, Acta Petrologica Sinica 19(3), p. 537-542	discordia age, upper intercept
Xinger area, Kuluktag, granitic gneiss	1943.0	6.0	3	U/Pb zircon	Guo et al., 2003, Acta Petrologica Sinica 19(3), p. 537-542	discordia age, upper intercept
Tamu, alkali feldspar granite	229.2	2.5	3	Pb/Pb zircon	Yang et al., 2001, Regional Geology of China 20, p.267-273	TM98-Y-25-4
Huoshi Bulak, alkali feldspar granite	261.5	2.7	3	Pb/Pb zircon	Yang et al., 2001, Regional Geology of China 20, p.267-273	HS98-Y-15
Aksu blueshist terrane, Sugetbrak Formation, metasediment	782.0	4	4	LA-ICP-MS U/Pb zircon	Zhu et al., 2011, Precambrian Research 185, p. 215-230	07A-20
Aksu blueshist terrane, Sugetbrak Formation, metasediment	765.0	4	4	LA-ICP-MS U/Pb zircon	Zhu et al., 2011, Precambrian Research 185, p. 215-230	07A-24
Aksu blueshist terrane, Sugetbrak Formation, metasediment	791.0	4	4	LA-ICP-MS U/Pb zircon	Zhu et al., 2011, Precambrian Research 185, p. 215-230	07A-35
Aksu blueshist terrane, Sugetbrak Formation, metasediment	598.0	4	4	LA-ICP-MS U/Pb zircon	Zhu et al., 2011, Precambrian Research 185, p. 215-230	07A-33
Aksu blueshist terrane, Sugetbrak Formation, metasediment	631.0	4	4	LA-ICP-MS U/Pb zircon	Zhu et al., 2011, Precambrian Research 185, p. 215-230	07A-34
Tugermin anticline, eastern Kuqa depression, granite	636.4	4.5	3	LA-ICP-MS U/Pb zircon	He et al., 2011, Acta Petrologica Sinica 27(1), p. 133-146	X25-1
Tugermin anticline, eastern Kuqa depression, granite	631.4	3.5	3	LA-ICP-MS U/Pb zircon	He et al., 2011, Acta Petrologica Sinica 27(1), p. 133-146	X25-2
Yangxia coal mine, Kuche depression, granite	646.5	3.9	3	LA-ICP-MS U/Pb zircon	Luo et al., 2011, Acta Geologica Sinica 85(4), p. 467-474	08KC11
Xinger area, felsic volcanics	740.0	7	2	SHRIMP U/Pb zircon	Xu et al., 2009, Precambrian Research 168, p. 247-258	Xb006
						youngest age peak
						youngest age peak
						youngest age peak
						youngest age peak

Xishankou area, felsic volcanics	725.0	10	2	SHRIMP U/Pb zircon	Xu et al., 2009, <i>Precambrian Research</i> 168, p. 247-258	A03112
Mochia-Khutuk, andesitic lava	615.0	6	2	SHRIMP U/Pb zircon	Xu et al., 2009, <i>Precambrian Research</i> 168, p. 247-258	2371D
Sishichang, basalt	298.5	2	2	SHRIMP U/Pb zircon	Xu et al., 2011, <i>Gondwana Research</i> 20, p. 485-497	YG01
Yingan, basalt	288.9	2	3	SHRIMP U/Pb zircon	Xu et al., 2011, <i>Gondwana Research</i> 20, p. 485-497	YG08
Qurugtagh, meta-gabbro	775.0	12	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	487
Qurugtagh, gneissic granite	2469.0	12	2	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	571-1
Qurugtagh, meta-diorite	2470.0	24	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	576
Qurugtagh, K-feldspar granite	806.0	8	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	586
Qurugtagh, K-feldspar granite	798.0	7	2	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	587
Qurugtagh, foliated granite	933.0	11	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	601
Qurugtagh, foliated granite	1048.0	19	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	569
Qurugtagh, gneiss	698.0	51	3	LA-ICP-MS U/Pb zircon	Shu et al., 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 774-790	589
Dzhakbolot Formation, deformed pegmatoidal granite	279.0	5	1	SHRIMP U/Pb zircon	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	27
Dzhakbolot Formation, deformed pegmatoidal granite	279.0	5	1	SHRIMP U/Pb zircon	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	26
Karasu Lake, Bolshoi Naryn Formation, mylonitic granite	778.0	11	1	SHRIMP U/Pb zircon	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	25
Karasu Lake, Bolshoi Naryn Formation, mylonitic granite	728.0	11	1	SHRIMP U/Pb zircon	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	24
Tian Shan west of the Talas-Ferghana fault						
Nischnejasmanskii Massif, cordierite-granat-granite	395.0	5.0	3	U/Pb zircon	Baratov et al 1967., Dokladi Akademii Nauk Tadschikskoi SSR 13(8), p.41-43	A-105
Hrodshamasarskii Massif, cordierite-biotit-granite	385.0	5.0	3	U/Pb monazite	Baratov et al 1967., Dokladi Akademii Nauk Tadschikskoi SSR 13(8), p.41-43	A-187
Alai Range, granite	274.4	7.0	2	LA-ICP-MS U/Pb zircon	DeGrave et al. 2012, <i>Journal of Asian Earth Sciences</i> 44, p. 149-168	AL40
Alai Range, diorite	287.0	37.0	4	LA-ICP-MS U/Pb zircon	DeGrave et al. 2012, <i>Journal of Asian Earth Sciences</i> 44, p. 149-168	KYR11
Alai Range, granite (dyke)	263.7	4.7	2	LA-ICP-MS U/Pb zircon	DeGrave et al. 2012, <i>Journal of Asian Earth Sciences</i> 44, p. 149-168	AL42
Alai Range, granite	283.7	3.5	2	LA-ICP-MS U/Pb zircon	DeGrave et al. 2012, <i>Journal of Asian Earth Sciences</i> 44, p. 149-168	AL37
Werchnejasmanskii massif, diorite	368.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-100
Werchnejasmanskii massif, diorite	387.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-100
Kuschaiski Massif, granodiorite	290.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-95
Karaguschtschanski Massif, granite	256.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-104
Nischnedewonaiski Massif, syenite	267.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-99
Nischnedewonaiski Massif, syenite	256.0	4	4	U/Pb zircon	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-99
Jarmasarski Massif, granite	230.0	4	4	U/Pb orthite	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-118
Jarmasarski Massif, granite	240.0	4	4	U/Pb zircon	Murina et al., 1973, <i>Trudy Akademii Nauk SSSR</i> 16, p. 321-329	A-118
Saway'aerdun gold deposit, quartz vein	133.7	5.6	4	U/Pb zircon	Chen and Li, 2003, <i>Acta Geoscientifica Sinica</i> 24(6), p. 563-567	single grain age
Garm massif, migmatized paragneiss	290.3	2	2	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	15
Garm massif, leucosome of vein-type migmatite	290.0	1.8	2	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	20
Garm massif, mesosome of injection migmatite	299.7	3.6	3	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	19
Garm massif, mesosome of injection migmatite	328.0	4.3	3	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	19
Garm massif, leucosome of injection migmatite	293.0	2.4	2	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	18
Garm massif, leucosome of injection migmatite	333.0	6.5	3	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	18
Garm massif, monzogabbro dyke	396.0	3	2	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	16
Garm massif, biotite tonalite	292.3	1.8	2	SHRIMP U/Pb zircon	Konopelko et al., 2015, <i>Journal of Asian Earth Sciences</i> 113,p. 711-727	21
Bozbatau Mountains, quartz-feldspar porphyry	467.0	5	1	SHRIMP U/Pb zircon	Alexeiev et al., 2016, <i>Gondwana Research</i> , doi:10.1016/j.gr.2016.02.003	KG 95
Bozbatau Mountains, felsic tuff	451.0	4	1	SHRIMP U/Pb zircon	Alexeiev et al., 2016, <i>Gondwana Research</i> , doi:10.1016/j.gr.2016.02.003	KG 94
Bozbatau Mountains, sheared rhyolite	445.0	4	1	SHRIMP U/Pb zircon	Alexeiev et al., 2016, <i>Gondwana Research</i> , doi:10.1016/j.gr.2016.02.003	MAV185/06
Kurama Range, Kyzata monzonite	416.0	9	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	14, 406701
Kurama Range, Almalyk, Kalmakyr monzonite	308.0	1	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	15, 406501
Kurama Range, Almalyk, Kalmakyr monzonite	308.0	4	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	16, 414700
Kurama Range, Almalyk, granite porphyry stock	315.0	1	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	17, 406403
Kurama Range, Almalyk, Kara-Kiya, deformed granite	317.0	8	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	18, 406801
Kurama Range, Akcha suite of Tangeldy, acid volcanic	305.0	3	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	19, 406301
Kurama Range, Kochbulak Au deposit, andesite of Nadak suite	301.0	4	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	20, 414802
Kurama Range, Sary-Cheku, granodiorite-porphyry	306.0	3	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	21, 415001
Kurama Range, Sary-Cheku, post-ore granite	297.0	3	2	SHRIMP U/Pb zircon	Seltmann et al. 2011, <i>Journal of Asian Earth Sciences</i> 42, p.821-838	22, 415000

Note: Quality 1–4 (1—excellent, 4—poor), an empirical qualitative measure of the reliability of the presented ages, depends on documentation (e.g., ages, mineral characteristics), method, instrumentation, number of data, concordance.

[†]The references transfer to the ages given in Figure 2 with the following notation: Issyk-Kul block, n1—Long et al., 2011a; n2—Xu et al., 2010; n3—Qian et al., 2009; n4—Seltmann et al., 2011; n5—Gao et al., 2009; n6—Konopelko et al., 2012; n7—Glorie et al., 2010; n8—De Grave et al., 2011; n9—Levashova et al., 2010; n10—Kröner et al., 2013; n11—Mikolaichuk et al., 1997; n12—De Grave et al., 2013; n13—Zheng et al., 2006; n14—Kröner et al., 2012; n15—Kröner et al., 2007; n16—Konopelko et al., 2014; Middle Tian Shan block, c1—Yang et al., 2006; c2—Yang et al., 2008; c3—Chen et al., 2009; c4—Han et al., 2004; c5—Dong et al., 2011; c6—Zhu et al., 2011b; c7—Wang et al., 2009; c8—Xu et al., 2006; c9—Su et al., 2008; c10—Long et al., 2011; c11—Xu et al., 2010; c12—Wang et al., 2007; c13—Gao et al., 2006; c14—Gao et al., 2009; c15—Li et al., 2011; c16—Zhang et al., 2007; c17—Gou et al., 2012; c18—Gao et al., 2011; c19—Konopelko et al., 2009; c20—Konopelko et al., 2007; c21—Seltmann et al., 2011; c22—Konopelko et al., 2008; c23—De Grave et al., 201; c24—Glorie et al., 2011; c25—Kröner et al., 2013; c26—Mikolaichuk et al., 1997; c27—De Grave et al., 2013; c28—Li et al., 2010; c29—Chen et al., 2000; c30—Alexeev et al., 2016; c31—Konopelko et al., 2013; North East Tian Shan, b1—Kröner et al., 2007; b2—Long et al., 2011; b3—Hu et al., 2008; b4—Hu et al., 2010; b5—Wang et al., 2012; b6—Tang et al., 2008; b7—Tang et al., 2010; b8—Zhang et al., 2008; b9—Xu et al., 2006; b10—Zhang et al., 2012b; b11—Liu et al., 2005; b12—Chen et al., 1999; b13—Tang et al., 2009; b14—Zhai et al., 2006; b15—Zhang et al., 2009; b16—Li et al., 2006a; b17—Zhao et al., 2008; b18—Zhao et al., 2009; b19—Wang et al., 2009; b20—Xu et al., 2010; b21—Zhou et al., 2005; b22—Zhu et al., 2009; b23—Wang et al., 2007; b24—Yang et al., 2012; b25—Yang and Zhou, 2009; b26—Gao et al., 2009; b27—Qian et al., 2009; West of Talas-Fergana fault, w1—De Grave et al., 2012; w2—Baratov et al., 1967; w3—Seltmann et al., 2011; w4—Murina et al., 1973; w5—Chen and Li, 2003; w6—Konopelko et al., 2015; w7—Alexeev et al., 2016; South Tian Shan belt and Karakum-Tarim, s1—Seltmann et al., 2011; s2—Konopelko et al., 2007; s3—Huang et al., 2012; s4—Mao et al., 2004; s5—Konopelko et al., 2009; s6—Li et al., 2007; s7—Sun et al., 2008b; s8—Zhu et al., 2011, s9—Wang et al., 2011; s10—Xu et al., 2006; s11—Zhu et al., 2008; s12—Ma et al., 2007; s13—Chen et al., 2009; s14—Ge et al., 2012; s15—Yang et al., 2006; s16—Zhang et al., 2008; s17—Xu et al., 2005; s18—Zhou et al., 2004a; s19—Deng et al., 2008; s20—Glorie et al., 2011; s21—Zheng et al., 2006; s22—Long et al., 2008; s23—Li et al., 2009; s24—Tian et al., 2010; s25—Su et al., 2010; s26—Yang et al., 2001; s27—Shu et al., 2011; s28—Xu et al., 2009; s29—Luo et al., 2011; s30—He et al., 2011.

TABLE DR2. AR-AR AND K-AR GEOCHRONOLOGY OF THE CENTRAL AND WESTERN TIAN SHAN

Unit, rock Type	Age [Ma]	Error (95%)	Method and mineral	Reference†	Sample number	Comment
Issyk-Kul block						
Kuokesu, diabase dyke	282.3	1.2	K-Ar whole rock	Zhang et al., 1998, <i>Acta Geologica Sinica</i> 72(1), p. 29-36	TG38-1 to 7	
NW Issyk Kul basin, olivine basalt	52.6	1.2	Ar-Ar whole rock	Sobel and Arnaud, 2000, <i>Lithos</i> 50, p. 191-215	KTS-1	plateau age
Suluterek, olivine basalt	60.7	0.8	Ar-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	96-1	
Suluterek, olivine basalt	60.5	0.7	Ar-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	96-2	
Qiaoema road, granitic porphyry	280	6	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-496	plateau age
Narat-Bayanbulak, basalt	254	5	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-503	plateau age
Muzhaert River, basalt	292	6	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-115	plateau age
western Tianshan, volcanic rock	212	3	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-224	
western Tianshan, volcanic rock	319	5	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-117	
western Tianshan, volcanic rock	330	5	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-210	
western Tianshan, volcanic rock	313	5	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-222	
Uchkuduk mountain, limburgite	42	8	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	551/3	age recalculated from original data*
Uchkuduk mountain, limburgite	49	2	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	551/2	age recalculated from original data*
Uchkuduk mountain, limburgite	53	12	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	551/6	age recalculated from original data*
Uchkuduk mountain, limburgite	21	5	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	552/1	age recalculated from original data*
Tyulek river, olivine trachybasalt	62	2	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	558/1	age recalculated from original data*
Tyulek river, basalt	53	6	K-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	5138	age recalculated from original data*
Suluterek, olivine basalt	89	7	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	550/1	age recalculated from original data*
Jeti Oguz massif, granite	340	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	1	age recalculated from original data*
Jeti Oguz massif, granite	355	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	2	age recalculated from original data*
Jeti Oguz massif, granite	350	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	3	age recalculated from original data*
Jeti Oguz massif, pegmatite	350	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	4	age recalculated from original data*
Jeti Oguz massif, granite-porphyry	328	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	5	age recalculated from original data*
Jeti Oguz massif, granite-porphyry	320	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	6	age recalculated from original data*
Jeti Oguz massif, granite-porphyry	358	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	7	age recalculated from original data*
Jeti Oguz massif, quartz-porphyry	354	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	8	age recalculated from original data*
Jeti Oguz massif, quartz-porphyry	386	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	9	age recalculated from original data*
Jeti-Oguz massif, quartz-biotite hornfels	319	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	10	age recalculated from original data*
Jeti-Oguz massif, gneiss	388	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	11	age recalculated from original data*
Jeti-Oguz massif, gneiss	392	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	12	age recalculated from original data*
Jeti-Oguz massif, gneiss	378	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	13	age recalculated from original data*
Sary Moinak massif, granite	278	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	14	age recalculated from original data*
Sary Moinak massif, granite	274	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	15	age recalculated from original data*
Sary Moinak massif, granite	267	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	16	age recalculated from original data*
Sary Moinak massif, granite	281	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	17	age recalculated from original data*
Sary Moinak massif, pegmatite	261	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	18	age recalculated from original data*
Sary Moinak massif, hornfels	256	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	19	age recalculated from original data*
Sary Moinak massif, chlorite schist	391	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	20	age recalculated from original data*
Sary Moinak massif, chlorite schist	375	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	21	age recalculated from original data*
Sary Moinak massif, chlorite schist	378	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	22	age recalculated from original data*
Terskey-Alatau Range, granite	409	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	23	age recalculated from original data*
Terskey-Alatau Range, granite	356	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	24	age recalculated from original data*
Terskey-Alatau Range, granite	354	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	25	age recalculated from original data*
Terskey-Alatau Range, granite	371	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	26	age recalculated from original data*
Terskey-Alatau Range, granite	351	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	27	age recalculated from original data*
Terskey-Alatau Range, granite	357	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	28	age recalculated from original data*
Terskey-Alatau Range, granite	382	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	29	age recalculated from original data*
Terskey-Alatau Range, granite	368	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	30	age recalculated from original data*
Terskey-Alatau Range, granite	379	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	31	age recalculated from original data*
Terskey-Alatau Range, granite	366	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	32	age recalculated from original data*
Susamyr, granite	377	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	33	age recalculated from original data*
Susamyr, granite	375	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	34	age recalculated from original data*
Susamyr, granite	383	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	35	age recalculated from original data*
Susamyr, granite	392	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	36	age recalculated from original data*
Kungey-Alatau Range, granite	356	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	37	age recalculated from original data*
Kungey-Alatau Range, granite	341	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	38	age recalculated from original data*
Kungey-Alatau Range, granite	356	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	39	age recalculated from original data*
Kurdai, granite	370	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	45	age recalculated from original data*
Kirgin Range, Aspara, granite	380	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	46	age recalculated from original data*
Maly Kemin, muscovite-gneiss	456	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	47	age recalculated from original data*
Maly Kemin, muscovite-gneiss	424	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	48	age recalculated from original data*
Maly Kemin, muscovite-gneiss	442	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	49	age recalculated from original data*
Maly Kemin, biotite gneiss	407	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	50	age recalculated from original data*
Maly Kemin, biotite gneiss	359	10	K-Ar whole rock	Krilov, 1960, <i>Doklady Sowjetskich Geologow</i> 1-5, p. 222-244	51	age recalculated from original data*

Maly Kemin, gneiss	369	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	52	age recalculated from original data*
Maly Kemin, gneiss	359	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	53	age recalculated from original data*
Maly Kemin, amphibole schist	321	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	54	age recalculated from original data*
Kurdai, biotite gneiss	414	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	55	age recalculated from original data*
Ottuk, biotite gneiss	392	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	56	age recalculated from original data*
Ottuk, biotite gneiss	395	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	57	age recalculated from original data*
Ottuk, biotite gneiss	364	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	58	age recalculated from original data*
Terskey-Alatau Range	407	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	59	age recalculated from original data*
Terskey-Alatau Range	362	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	60	age recalculated from original data*
Jeti Oguz massif, biotite gneiss	378	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	61	age recalculated from original data*
Jeti Oguz massif, biotite gneiss	388	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	62	age recalculated from original data*
Jeti Oguz massif, biotite gneiss	392	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	63	age recalculated from original data*
Dzhuuka, quartz-biotite hornfels	365	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	64	age recalculated from original data*
Dzhuuka, sericite schist	391	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	65	age recalculated from original data*
Barskon, chlorite schist	375	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	66	age recalculated from original data*
Barskon, chlorite schist	378	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	67	age recalculated from original data*
Barskon, chlorite schist	391	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	68	age recalculated from original data*
Barskon, chlorite schist	409	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	69	age recalculated from original data*
Sary Bulak, schist	345	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	70	age recalculated from original data*
Sary Bulak, schist	340	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	71	age recalculated from original data*
Sary Bulak, schist	415	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	72	age recalculated from original data*
Minkush, schist	372	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	74	age recalculated from original data*
Minkush, biotite gneiss	356	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	75	age recalculated from original data*
Achik Tash, biotite gneiss	385	10	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	76	age recalculated from original data*
Kangsu gold deposit, sericite	255-268		Ar-Ar whole rock	Zhang et al., 2002, Resource Geology 52(3), p. 249-261	KG-4	
Kenkol River, Talas basin, basalt	32-50		K-Ar whole rock	Dobretsov and Zagruzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	33/1	
Makbal Complex, eclogite	482	17	K-Ar paragonite	Tagiri et al., 1995, The Island Arc 4, p. 280-292	82-2641	age recalculated from original data*
Makbal Complex, schist	509	13	K-Ar phengite	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	KG17	coordinates estimated
Makbal Complex, schist	769	19	K-Ar biotite	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	94071602	coordinates estimated
Makbal Complex, schist	717	18	K-Ar phengite	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	94071602	coordinates estimated
Makbal Complex, winchite schist	881	22	K-Ar winchite	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	93063015	coordinates estimated
Makbal Complex, granite	399	10	K-Ar orthoclase	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	granite 1	
Makbal Complex, granite	389	8	K-Ar orthoclase	Tagiri et al., 2010, Journal of Mineralogical and Petrological Sciences 105, p. 233-250	granite 2	
G. Sarkamysh Range, granite	413.9	8.5	Ar-Ar biotite	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-17	plateau age
Dzhungal-Tau Range, granite	426.6	18.5	Ar-Ar biotite	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-21	plateau age
Kichi-Kemin River, granite-gneiss	469	1	Ar-Ar muscovite	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG40	plateau age
Kichi-Kemin River, mylonitic granite-gneiss	471	1	Ar-Ar muscovite	Kröner et al., 2012, Gondwana Research 21, p. 901-927	KG46	plateau age
Orto-Tokoj lake, granite	174	2	Ar-Ar microcline	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	IK-01	plateau age
Kjok-Kia base, granite	310.4	4.2	Ar-Ar orthoclase	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	IK-12	plateau age
Ak-Suu thermal baths, granite	265.1	4.5	Ar-Ar microcline	DeGrave et al., 2013, Gondwana Research 23, p. 998-1020	IK-13	plateau age
Dzhungal-Tau Range, granite	367	7	Ar-Ar K-feldspar	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	TF-23	plateau age
Kara-Katta Range, granite	240.5	4.8	Ar-Ar K-feldspar	Glorie et al., 2010, Journal of Asian Earth Sciences 38, p. 131-146	IK-07	plateau age
Middle East Tian Shan						
Malaya Almatinka, granite	363	5	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	40	age recalculated from original data*
Malaya Almatinka, granite	392	5	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	41	age recalculated from original data*
Bolschaya Almatinka, granite	394	5	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	42	age recalculated from original data*
Bolschaya Almatinka, granite	392	5	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	43	age recalculated from original data*
Bolschaya Almatinka, granite	382	5	K-Ar whole rock	Krilov, 1960, Doklady Sowjetskich Geologow 1-5 , p. 222-244	44	age recalculated from original data*
Altynemel, kamptonite	252	10	K-Ar whole rock	Dobretsov and Zagruzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	1064	age recalculated from original data*
Altynemel, kamptonite	258	10	K-Ar whole rock	Dobretsov and Zagruzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	KA-72	age recalculated from original data*
Zhansu, K-feldspar granitic porphyry	285	6	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-148	plateau age
Kangsugou, shoshonite	249	4	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	4	plateau age
Axi, basaltic andesite	306	6	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-78	plateau age
Heishantou, shoshonite	264	5	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	1	plateau age
Qunjigoukou, shoshonite	251	5	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	2	plateau age
South Kezikezang, shoshonite	288	6	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	3	plateau age
Aobaganjin, shoshonite	250	4	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	5	plateau age
Mosizatoe, adakite	268	5	Ar-Ar whole rock	Zhao et al., 2009, Gondwana Research 16, p. 216-226	6	plateau age
western Tianshan, volcanic rock	268	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-162	plateau age
western Tianshan, volcanic rock	261	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-168	plateau age
Heishantou, basalt	264	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-180	plateau age
western Tianshan, volcanic rock	274	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-182	plateau age
western Tianshan, volcanic rock	251	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-338	plateau age
Kezikezang, shoshonite	288	6	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-346	plateau age
Aobaganzen, trachybasalt	244	5	Ar-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-413	plateau age
western Tianshan, volcanic rock	261	4	K-Ar whole rock	Zhao et al., 2003, Geochimica 32(4), p. 317-327	Xt-90	

western Tianshan, volcanic rock	272	4	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-185
western Tianshan, volcanic rock	270	4	K-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-346
western Tianshan, volcanic rock	273	5	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-17
Halatuluke, quartz albite porphyry	260	5	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-33
Alataw, basalt	318.9	2.2	Ar-Ar whole rock	Wang et al., 2007, <i>Chemical Geology</i> 236, p. 42-64	WX721
Alataw, adakite	320	1.2	Ar-Ar whole rock	Wang et al., 2007, <i>Chemical Geology</i> 236, p. 42-64	WX740
Alataw, dacite	306.3	3.5	Ar-Ar whole rock	Wang et al., 2007, <i>Chemical Geology</i> 236, p. 42-64	WX733
western Tianshan, volcanic rock	205	4	Ar-Ar whole rock	Zhao et al., 2003, <i>Geochimica</i> 32(4), p. 317-327	Xt-5
Kekesu, blueschist	345.39	6.51	Ar-Ar, phengite	Gao et al., 1995, <i>Tectonophysics</i> 250, p. 151-168	KKS13-8
Sailimu area, NW Tien Shan, orthogneiss	413	6	Ar-Ar muscovite	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-2f
Sailimu area, NW Tien Shan, migmatite	417	5	Ar-Ar muscovite	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-2k
Sailimu area, NW Tien Shan, mylonitic quartzite	299.6	0.3	Ar-Ar muscovite	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-8a
Sailimu area, NW Tien Shan, mylonitic quartzite	316	0.3	Ar-Ar muscovite	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-8a
Sailimu area, NW Tien Shan, micaschist	336	4	Ar-Ar muscovite	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-6g
Sailimu area, NW Tien Shan, amphibolite	436	0.5	Ar-Ar amphibole	Wang, 2011, <i>Journal of Asian Earth Sciences</i> 42, p. 839-853	07-6d
Bingdaban gold deposit, mylonitized granite	222.5	1.2	Ar-Ar muscovite	Zhu et al., 2007, <i>Ore Geology Reviews</i> 32, p. 337-365	TS264
Bingdaban gold deposit, quartz vein	220.9	0.8	Ar-Ar muscovite	Zhu et al., 2007, <i>Ore Geology Reviews</i> 32, p. 337-365	TS267
Dzhakbolot Formation, deformed pegmatoidal granite	241.1	2.3	Ar-Ar muscovite	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	27
Dzhakbolot Formation, deformed pegmatoidal granite	275.5	2.2	Ar-Ar muscovite	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	26
Karasu Lake, Bolshoi Naryn Formation, mylonitic granite	199.2	3.4	Ar-Ar muscovite	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	25
Karasu Lake, Bolshoi Naryn Formation, mylonitic granite	217.4	7.1	Ar-Ar muscovite	Konopelko et al., 2013, <i>Journal of Asian Earth Sciences</i> 73, p. 334-346	24
Central Tian Shan					
Naryn, basalt	54.1	1.2	Ar-Ar whole rock	Sobel and Arnaud, 2000, <i>Lithos</i> 50, p. 191-215	KTS-2
Baiduli, basalt	60.6	0.4	Ar-Ar whole rock	Mikolaichuk et al., 2006, <i>Proceedings of 3rd International Symposium Bishkek</i> , p.50-57	465
Kumtor gold deposit	285.5	1.2	Ar-Ar whole rock	Mao et al., 2004, <i>Economic Geology</i> 99, p. 1771-1780	JS-5
Kumtor gold deposit	288.4	0.6	Ar-Ar gold ore	Mao et al., 2004, <i>Economic Geology</i> 99, p. 1771-1780	JS-6
Bayduy Range, olivine basalt	48	10	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	562a
Bayduy Range, olivine basalt	55	2	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	566/3
West end of Naryn basin, augitite dyke	105	5	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	573/1
West end of Naryn basin, limburgite	106	11	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	575/1
West end of Naryn basin, augitite dyke	233	5	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	574/1
West end of Naryn basin, limburgite	214	7	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	575/2
Bayduy Range, olivine basalt	55	2	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	566/3
Naryn basin, river Kokdschar, augitite dyke	262	10	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	570
Moldotau Range, limburgite	254	16	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	478i
Moldotau Range, limburgite	277	14	K-Ar whole rock	Dobretsov and Zagruzina, 1977, <i>Doklady Akademii Nauk CCCP</i> 235, p. 648-651	483a
North MTSZ (Mishigou)	269.1	5.4	Ar-Ar muscovite	Laurent-Charvet et al., 2003, <i>Tectonics</i> 22(2), TC901047	N3
Kumtor gold deposit	284.3	3	Ar-Ar sericite	Mao et al., 2004, <i>Economic Geology</i> 99, p. 1771-1780	JS-5
Kumtor gold deposit	285.4	0.2	Ar-Ar sericite	Mao et al., 2004, <i>Economic Geology</i> 99, p. 1771-1780	JS-6
Yili Arc, biotite granite	263.4	0.6	Ar-Ar biotite single grain	de Jong et al., 2008, <i>International Journal of Earth Sciences</i> 98, p. 1239-1258	XJ620
Baluntai section, granitic mylonite	294.4	0.9	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02054-1
Baluntai section, granitic mylonite	310.7	1.8	Ar-Ar muscovite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02054
Baluntai section, granitic mylonite	303.5	0.9	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02054
Baluntai section, gneiss	356.7	1.6	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02059
Baluntai section, gneiss	359.2	1.5	Ar-Ar muscovite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02059
Baluntai section, gneiss	372.9	9.1	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02062-1
Baluntai section, granitic-dioritic mylonite	375.2	1.1	Ar-Ar muscovite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02062-2
Baluntai section, dioritic mylonite	361.7	1.1	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02067-1
Kumishi section, granitic mylonite	301.7	1.2	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02068
Kumishi section, granitic mylonite	287.8	0.8	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02082-1
Kumishi section, granitic mylonite	289.9	1.2	Ar-Ar muscovite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02082-1
Kumishi section, granitic mylonite	299.6	1.3	Ar-Ar muscovite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02082-2
Kumishi section, granitic mylonite	292.8	0.9	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02084-2
Kumishi section, granitic mylonite	311	1.7	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02084-5
Kumishi section, gneiss	358.4	1.2	Ar-Ar biotite	Yang et al., 2007, <i>Journal of Structural Geology</i> 29, p. 1605-1621	D02107
Gangou area, deformed and metamorphosed clastic rock	266	1.3	Ar-Ar biotite	Yang et al., 2009, <i>IJES</i> 98, p. 1311-1324	D02042-1
Gangou area, deformed and metamorphosed clastic rock	266.2	1	Ar-Ar muscovite	Yang et al., 2009, <i>IJES</i> 98, p. 1311-1324	D02049
Tianger area, mylonitized granite	248.6	0.4	Ar-Ar muscovite	Zhu et al., 2011, <i>Ore Geology Reviews</i> 40, p. 108-121	TS272
Tianger area, mylonitized granite	243.9	0.4	Ar-Ar muscovite	Zhu et al., 2011, <i>Ore Geology Reviews</i> 40, p. 108-121	TS277
Tianger area, mylonitized granite	238.1	0.3	Ar-Ar muscovite	Zhu et al., 2011, <i>Ore Geology Reviews</i> 40, p. 108-121	TS283
Tianger area, mylonitized granite	242	0.6	Ar-Ar muscovite	Zhu et al., 2011, <i>Ore Geology Reviews</i> 40, p. 108-121	TS294
Ferghana ridge, sheared metapelite	250.36	3.52	Ar-Ar phengite	Rolland et al., 2013, <i>Journal of Asian Earth Sciences</i> 67-68, p. 76-92	K10-4D
Ferghana ridge, mica schist	311.64	3.97	Ar-Ar muscovite	Rolland et al., 2013, <i>Journal of Asian Earth Sciences</i> 67-68, p. 76-92	K10-5A
Ferghana ridge, pegmatite dyke (crosscutting mica schist)	195.03	2.58	Ar-Ar muscovite	Rolland et al., 2013, <i>Journal of Asian Earth Sciences</i> 67-68, p. 76-92	K10-5D
Talas ridge, deformed granite	256.16	3.94	Ar-Ar phengite	Rolland et al., 2013, <i>Journal of Asian Earth Sciences</i> 67-68, p. 76-92	K10-17A
Talas ridge, deformed granite	241.6	2.8	Ar-Ar phengite	Rolland et al., 2013, <i>Journal of Asian Earth Sciences</i> 67-68, p. 76-92	K10-17B

Talas ridge, metapelite	317.36	3.75	Ar-Ar phengite	Rolland et al., 2013, Journal of Asian Earth Sciences 67-68, p. 76-92	K10-18	plateau age, 2 steps
Qiongkushitai section, granodiorite	263.4	0.6	Ar-Ar biotite	Wang et al., 2007, Acta Petrologica Sinica 23(6), p. 1354-1368	XJ620	plateau age
S margin of western Tianshan, collisional granite	348.9	0.3	Ar-Ar	Cai et al., 96, Scientia Geologica Sinica 31(4), p. 384-390	BLT-30	plateau age
North MTSZ (Bindaban)	244.7	2.6	Ar-Ar biotite	Laurent-Charvet et al., 2003, Tectonics 22(2), TC901047	TS07	spot fusion (isochron)
North MTSZ (Kumux)	292.6	3.2	Ar-Ar biotite	Laurent-Charvet et al., 2003, Tectonics 22(2), TC901047	TS520	spot fusion (isochron)
Baluntai section, dioritic mylonite	402.8	2.2	Ar-Ar hornblende	Yang et al., 2007, Journal of Structural Geology 29, p. 1605-1621	D02068	plateau age
Kumishi section, granitic mylonite	305	35	Ar-Ar hornblende	Yang et al., 2007, Journal of Structural Geology 29, p. 1605-1621	D02084-5	isochron age
South Tian Shan collisional belt						
Tuyon basin, olivine basalt	113.3	1.6	Ar-Ar whole rock	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	95T111w	plateau age
Tekelik, olivine basalt	74	1.25	Ar-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	TK3	isochron age
Tekelik, olivine basalt	70.98	2.88	Ar-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	TK1	isochron age
Tekelik, basalt	76	0.8	Ar-Ar whole rock	Mikolaichuk et al., Proceedings of 3rd International Symposium Bishkek	25-99	plateau age
Tuoyun basin, basalt	61.1	0.9	Ar-Ar whole rock	Huang et al., 2005, Tectonophysics 409, p. 107-124	tyar0106	plateau age
Tuoyun basin, basalt	58.3	0.9	Ar-Ar whole rock	Huang et al., 2005, Tectonophysics 409, p. 107-124	tyar1005	plateau age
Terek River, limburgite	61	2	K-Ar whole rock	Dobretsov and Zaguzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	584/2	age recalculated from original data*
Tekelik River, olivine basalt	59	2	K-Ar whole rock	Dobretsov and Zaguzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	586/13	age recalculated from original data*
Tekelik River, olivine basalt	74	3	K-Ar whole rock	Dobretsov and Zaguzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	586/2	age recalculated from original data*
Tekelik River, olivine basalt	273	14	K-Ar whole rock	Dobretsov and Zaguzina, 1977, Doklady Akademii Nauk CCCP 235, p. 648-651	344-b	age recalculated from original data*
S margin of western Tianshan, ophiolite	250.5	7.9	Ar-Ar whole rock	Cai et al., 96, Scientia Geologica Sinica 31(4), p. 384-390	KCIII-63	plateau age
Tuyon basin, diabase sill	59	1.4	Ar-Ar biotite	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T123	plateau age
Tuyon basin, gabbro sill	67.3	0.1	Ar-Ar biotite	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T115	plateau age
Tuyon basin, lamprophyre sill	45.8	0.5	Ar-Ar biotite	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T124b	plateau age
Tuyon basin, lamprophyre sill	42.6	0.9	Ar-Ar biotite	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T124d	plateau age
Atbashi, eclogite	327.1	4.2	Ar-Ar phengite	Simonov et al., 2008, Russian Geology and Geophysics 49, p. 803-815	G-8	plateau age
Atbashi, eclogite	324.2	9.7	Ar-Ar glaucophane	Simonov et al., 2008, Russian Geology and Geophysics 49, p. 803-815	G-8	plateau age
Atbashi, eclogite	281	11	Ar-Ar glaucophane	Simonov et al., 2008, Russian Geology and Geophysics 49, p. 803-815	G-17	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	311.6	0.4	Ar-Ar white mica	Klemd et al., 2005, Journal of Geology 113, p. 157-168	GC8-2	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	311.3	0.4	Ar-Ar white mica	Klemd et al., 2005, Journal of Geology 113, p. 157-168	GC5-1	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	327.8	0.5	Ar-Ar white mica	Klemd et al., 2005, Journal of Geology 113, p. 157-168	GC9-1	total gas age
S-Tianshan HP-LT-belt, blueshist facies rocks	321	0.5	Ar-Ar white mica	Klemd et al., 2005, Journal of Geology 113, p. 157-168	GC9-3	total gas age
S-Tianshan HP-LT-belt, blueshist facies rocks	322.9	0.8	Ar-Ar white mica	Klemd et al., 2005, Journal of Geology 113, p. 157-168	GC6-3	total gas age
Atbashi, eclogite	316.5	2	Ar-Ar phengite	Hegner et al., 2010, American Journal of Science 310, p. 916-950	KG23	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	331	2	Ar-Ar phengite	Gao and Klemd, 2003, Lithos 66, p. 1-22	CG4-2	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	344	1	Ar-Ar crosssite	Gao and Klemd, 2003, Lithos 66, p. 1-22	CG4-2	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	345.4	0.7	Ar-Ar phengite/crosssite	Gao et al., 2006, Acta Petrologica Sinica 22(5), p. 1049-1061	GC8-2	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	334.7	0.9	Ar-Ar phengite/crosssite	Gao et al., 2006, Acta Petrologica Sinica 22(5), p. 1049-1061	GC9-1	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	317.1	0.2	Ar-Ar phengite/crosssite	Gao et al., 2006, Acta Petrologica Sinica 22(5), p. 1049-1061	GC9-3	plateau age
S-Tianshan HP-LT-belt, blueshist facies rocks	310.3	0.3	Ar-Ar phengite/crosssite	Gao et al., 2006, Acta Petrologica Sinica 22(5), p. 1049-1061	GC8-5	plateau age
S-Tianshan HP-LT-belt, eclogite	381	1	Ar-Ar muscovite	Gao et al., 2000, Chinese Science Bulletin 45(11), p. 1047-1051	965-16	plateau age
S-Tianshan HP-LT-belt, blueshist	364	1	Ar-Ar muscovite	Gao et al., 2000, Chinese Science Bulletin 45(11), p. 1047-1051	9614-3	plateau age
South Tianshan, diorite	245.1	0.8	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
South Tianshan, diorite	305.3	2.7	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
South Tianshan, diorite	318.1	2.2	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
Korda area, mylonitic diorite	347	10	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	TS1	total gas age
Korda area, mylonitic gneiss	286	10	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	TS20	total gas age
N South Tianshan, granitoid	254.5	4.8	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N21	laser fusion age
N South Tianshan, granitoid	260.1	3.4	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N21	laser fusion age
N South Tianshan, volcanic rock	295.5	0.6	Ar-Ar biotite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N70	laser fusion age
Yili Arc basement, micaceous quartzite	252.3	0.3	Ar-Ar biotite	de Jong et al., 2008, International Journal of Earth Sciences 98, p. 1239-1258	XJ679	plateau age
Yili Arc basement, micaceous quartzite	253.3	0.3	Ar-Ar muscovite	de Jong et al., 2008, International Journal of Earth Sciences 98, p. 1239-1258	XJ680	plateau age
Kekesu section, quartzite	323	1	Ar-Ar white mica	Wang et al., 2009, Journal of Geology 118, 59-77	XJ611	plateau age
Kekesu section, blueschist	316	2	Ar-Ar white mica	Wang et al., 2009, Journal of Geology 118, 59-77	XJ607-2b	plateau age
Kekesu section, blueschist	331	1	Ar-Ar white mica	Wang et al., 2009, Journal of Geology 118, 59-77	XJ612	plateau age
Ouxi Daban, metamorphic rocks	368	1	Ar-Ar muscovite	Li et al., 2006, Acta Petrologica Sinica 20(3), p. 691-696	K97/1	plateau age
Kuruktag, mylonite	383.2	2.6	Ar-Ar muscovite	Cai et al., 2011, Geology in China 38(4), p. 855-867	EX14-2	plateau age
Central Tianshan, mylonitic gneiss	301.8	1.1	Ar-Ar muscovite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N13	laser fusion age
Central Tianshan, mylonitic gneiss	303	1	Ar-Ar muscovite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N13	laser fusion age
Central Tianshan, mylonitic gneiss	313.7	2.6	Ar-Ar muscovite	Yin et al., 1998, Tectonics 17(1), p. 1-27	N13	laser fusion age
Heyingshan, mylonitic phyllite	259	2	Ar-Ar muscovite	Wang et al., 2011, Tectonophysics 497, p. 85-104	437	plateau age
Heyingshan, mylonitic phyllite	256	2	Ar-Ar muscovite	Wang et al., 2011, Tectonophysics 497, p. 85-104	438-1	plateau age
Tuyon basin, olivine basalt	119.7	8.1	Ar-Ar plagioclase	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	95T111p	plateau age
Tuyon basin, olivine basalt	46.5	3.8	Ar-Ar amphibole	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T124a	plateau age
Tuyon basin, olivine basalt	48	1.4	Ar-Ar amphibole	Sobel and Arnaud, 2000, Lithos 50, p. 191-215	94T124c	plateau age
S-Tianshan HP-LT-belt, eclogite	401	1	Ar-Ar sodic amphibole	Gao et al., 2000, Chinese Science Bulletin 45(11), p. 1047-1051	965-12	plateau age
S-Tianshan HP-LT-belt, blueshist	370	1	Ar-Ar sodic amphibole	Gao et al., 2000, Chinese Science Bulletin 45(11), p. 1047-1051	9615-2	plateau age
Bayinbulake, granitoid	297.3	1.1	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N7	laser fusion age

Bayinbulake, granitoid	306.4	0.5	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N7	laser fusion age
Bayinbulake, granitoid	308.3	0.6	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N7	laser fusion age
South Tianshan, diorite	224.2	0.8	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
South Tianshan, diorite	293.2	0.9	Ar-Ar hornblende	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
South Tianshan, diorite	317.3	3.3	Ar-Ar hornblende	Yin et al., 1998, Tectonics 17(1), p. 1-27	N39	laser fusion age
Korla area, mylonitic diorite	262	5	Ar-Ar hornblende	Yin et al., 1998, Tectonics 17(1), p. 1-27	TS1	total gas age
Korla area, mylonitic diorite	333	5	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	TS1	total gas age
N South Tianshan, granitoid	230.8	0.8	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N23	laser fusion age
N South Tianshan, granitoid	240.4	1.4	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N23	laser fusion age
N South Tianshan, granitoid	245.9	1.4	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N23	laser fusion age
N South Tianshan, volcanic rock	264.1	1.5	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N70	laser fusion age
N South Tianshan, volcanic rock	267.9	0.8	Ar-Ar K-feldspar	Yin et al., 1998, Tectonics 17(1), p. 1-27	N70	laser fusion age
S margin of western Tianshan, mylonite	259.1	3.3	Ar-Ar	Cai et al., 96, Scientia Geologica Sinica 31(4), p. 384-390	KL-32(A)	plateau age, thermal overprint
S margin of western Tianshan, mylonite	370	4.8	Ar-Ar	Cai et al., 96, Scientia Geologica Sinica 31(4), p. 384-390	KL-32(A)	plateau age
Karakum-Tarim cratons, Northern Tarim basin						
N Tarim basin, basalt	274.08	2.35	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	DWG07-1	plateau age
N Tarim basin, basalt	271.93	3.67	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	DWG07-4	plateau age
N Tarim basin, basalt	282.9	1.55	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	LKC07-1	plateau age
N Tarim basin, basalt	262.3	4.05	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	TWC07-1	plateau age
N Tarim basin, basalt	285.28	8.47	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	XHZ07-7	plateau age
N Tarim basin, basalt	268.88	4.15	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	Z1-6	plateau age
N Tarim basin, basalt	271.05	3.47	Ar-Ar whole rock	Zhang et al., 2010, Gondwana Reserach 18, p. 596-610	Z16-2	plateau age
Yingan section, basalt	281.8	4.2	Ar-Ar whole rock	Yang et al., 2006, Journal of Zhejiang University 7, p. 320-324	Yg20-21	plateau age
SW Tarim, basalt	290.1	3.5	Ar-Ar whole rock	Yang et al., 2006, Journal of Zhejiang University 7, p. 320-324	Txn25-21	plateau age
Yigan, basalt	248.3	3.8	K-Ar whole rock	Yang et al., 2006, Journal of Zhejiang University 7, p. 320-324	Yang (unpublished)	Yang (unpublished)
Yigan, basalt	287.2	5.6	K-Ar whole rock	Yang et al., 2006, Journal of Zhejiang University 7, p. 320-324	Yang (unpublished)	Yang (unpublished)
Yigan, basalt	289.6	5.6	K-Ar whole rock	Yang et al., 2006, Journal of Zhejiang University 7, p. 320-324	K259	plateau age
Kuruktag, gabbro sill	229.7	3.7	Ar-Ar whole rock	Bian et al., 2010, Acta Petrologica Sinica 26(1), p. 274-282	TG38	isochron age
Kurkutag, diabas dyke	282.3	5	Ar-Ar whole rock	Zhang et al., 1998, Acta Geologica Sinica 72(1), p. 29-36	X25-1	plateau age
Tugerming anticline, eastern Kuqa depression, granite	278.9	2.4	Ar-Ar	He et al., 2011, Acta Petrologica Sinica 27(1), p. 133-146	X25-2	plateau age
Tugerming anticline, eastern Kuqa depression, granite	267.9	2.6	Ar-Ar	He et al., 2011, Acta Petrologica Sinica 27(1), p. 133-146		
Tian Shan west of the Talas-Fergana fault						
Muruntau, metasomatite	226.2	1.1	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MRL25328	plateau age
Muruntau, metasomatite	254.4	2.6	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MRL25329	plateau age
Muruntau, quartz vein	234.9	36.4	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MRL2532a	plateau age, poor precision
Muruntau, quartz vein	250.8	17.4	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MRL2532b	integrated age, excess Ar
Muruntau, quartz vein	260.2	1.8	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MUR-1	integrated age
Muruntau, quartz vein	256.5	1.4	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	MUR-1	integrated age
Muruntau, metasomatite	245.3	1.3	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	P9749	plateau age
Muruntau, metasomatite	247.2	1.8	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	P9749	plateau age
W of Muruntau, phyllite	275.1	3.2	Ar-Ar sericite	Wilde et al., 2001, Economic Geology 96, p. 633-644	P9759	plateau age, Ar loss
river Fan-Darja, valley Raneft, quartz-diorite	297	10	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	842	age recalculated from original data*
river Jangob, valley Beresow, quartz-diorite	296	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	864	age recalculated from original data*
river Mairhura, granodiorite	282	10	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	777	age recalculated from original data*
river Mairhura, valley Panj-Hrok, granodiorite	310	10	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	878	age recalculated from original data*
river Eiddui, valley Hrodscha-Sang-Hrok, quartz-diorite	305	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	870	age recalculated from original data*
river Warsob, valley Farob, quartz-diorite	311	10	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	786	age recalculated from original data*
river Warsob, valley Kulon, biotite-granite	281	6	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	110	age recalculated from original data*
river Warsob, valley Guschar, biotite-granite	273	12	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	111	age recalculated from original data*
river Warsob, upper part, biotite-granite	248	10	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	790	age recalculated from original data*
river Kafirnigan (Jawros), biotite-granite	303	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	501	age recalculated from original data*
river Warsob, middle part, porphyric biotite-granite	309	2	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	501	age recalculated from original data*
river Warsob (Takob), porphyric biotite-granite	309	5	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	757	age recalculated from original data*
river Kafirnigan, valley Jawros, biotite-granite	292	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	637	age recalculated from original data*
Warsob (Takob), porphyric biotite-granite	316	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	793	age recalculated from original data*
river Warsob, middle part, aplitic biotite-granite	289	5	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	500	age recalculated from original data*
massif Turpi, nepheline-syenite	280	9	K-Ar lepidomelan	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	433	age recalculated from original data*
massif Dewonasi, nepheline-syenite	236	7	K-Ar lepidomelan	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	1314	age recalculated from original data*
Kafirnigan, kamptonite	238	9	K-Ar biotite	Bararov and Melnichenko, 1970, Trudy WSEGEI, nowaja seria 168, p. 64-70	1216b	age recalculated from original data*
Turpinski Massif, amphibolite	280	12	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	433	age recalculated from original data*
Turpinski Massif, nepheline syenite	253	8	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	209-A	age recalculated from original data*
Turpinski Massif, nepheline syenite	251	9	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	173-A	age recalculated from original data*
Turpinski Massif, nepheline syenite	236	9	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	T-17	age recalculated from original data*
Turpinski Massif, nepheline syenite	236	7	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	985	age recalculated from original data*
Turpinski Massif, nepheline syenite	236	7	K-Ar lepidomelan	Melnichenko and Dusmatov, 1974, Trudy sessii Komissii po Opredeleniju Absoljutnogo Vozrasta Geologija 17, p. 330-341	1314	age recalculated from original data*

Figure DR1. Stratigraphy of the Gissar range, Garm-massif area (includes Karategin range), and Alai range, compiled from Vlasov et al. (1991), and our own observations. The interpretation of the geotectonic settings is our own.

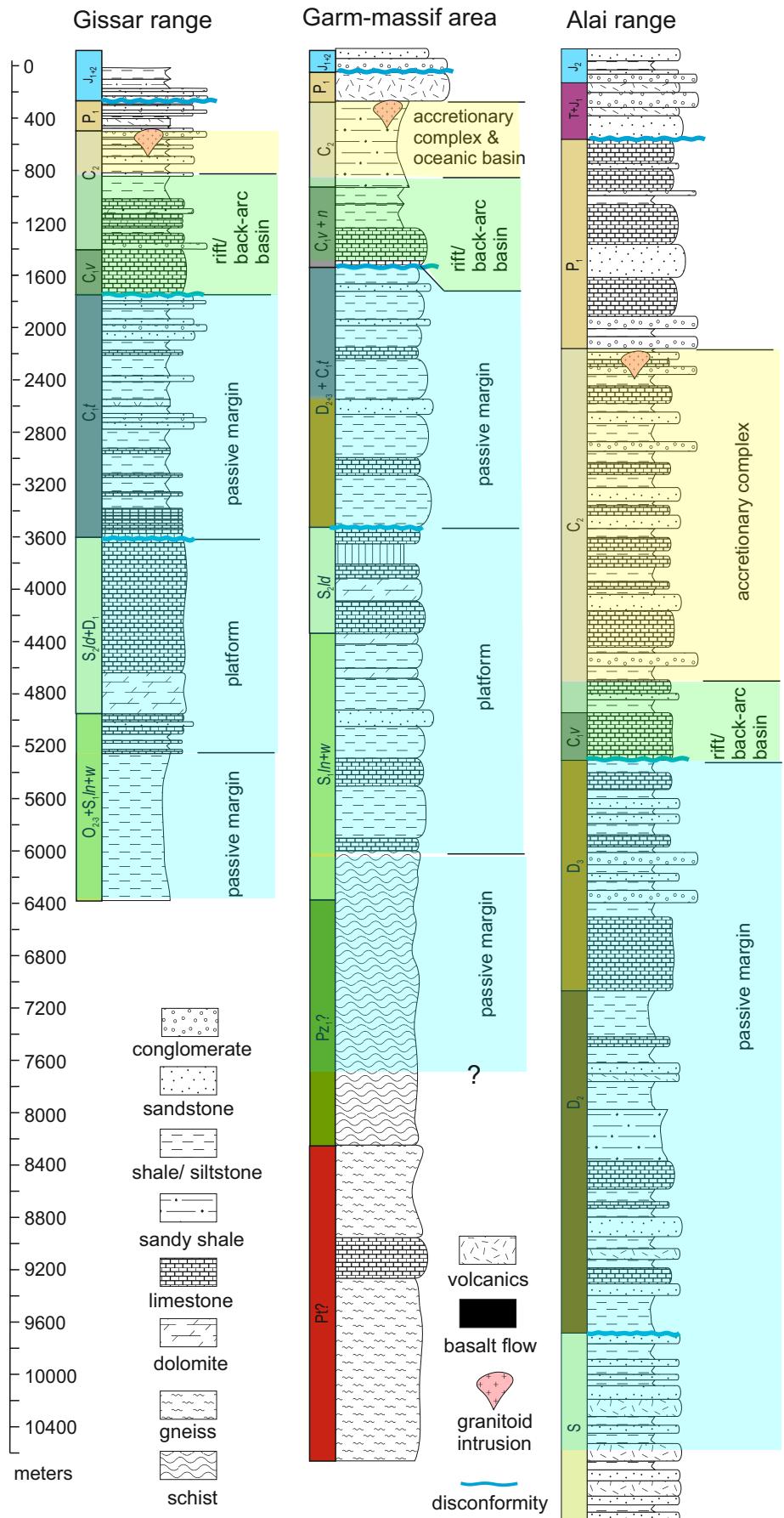


TABLE DR3. SAMPLE LOCATION, ELEVATION, AND ROCK TYPE

Sample name	Elevation (m)	Latitude (°N)	Longitude (°E)	Description
<u>Ghissar range</u>				
6812B1-D1	1190	38°45.462'	68°49.102'	K-feldspar granite
6813B1/X1A	2715	38°42.561'	69°30.394'	Diorite
6814A1	1860	38°59.743'	68°45.949'	Biotite-granite with xenoliths
6814B1	1778	38°58.243'	68°45.672'	K-feldspar biotite-granite with aplite dykes
6814C1	1662	38°57.372'	68°47.360'	K-feldspar granite
6814D1	1508	38°55.074'	68°48.731'	Granite
6814E1	1394	38°53.860'	68°49.785'	Migmatite, chloritized
6814F1	1280	38°51.388'	68°50.414'	K-feldspar granite, weakly deformed
6814G1	1211	38°49.988'	68°49.421'	K-feldspar granite
6814H1	1141	38°47.427'	68°49.438'	Aplitic granite dyke
6910C1	1253	38°49.678'	69°54.689'	Granite
6910D1	1083	38°44.783'	69°50.078'	Granodiorite
6910F1	1679	38°41.586'	69°37.612'	Biotite-granite
9398	n.d.*	~39°00'	~69°37'	Alkalibasalt
1774	n.d.*	~38°43'	~69°23'	Alkalibasalt
1809	n.d.*	~38°43'	~69°23'	Alkalibasalt
9490	n.d.*	~38°59'	~69°40'	Alkalibasalt
P-III	n.d.*	~38°43'	~69°23'	Alkalibasalt
0818H1	2353	39°03.703'	68°50.968'	Pebbly sandstone (Paleogene)
<u>Garm crystalline massif</u>				
GW20	1265	39°00.684'	70°10.091'	Granodiorite-gneiss
GW22	1407	39°08.288'	70°11.319'	Granodiorite
GW23	1320	39°05.750'	70°12.136'	Granite-gneiss
GW25	1322	39°02.295'	70°07.812'	Migmatitic diorite-gneiss
GW27	1615	39°05.985'	70°04.798'	Granite-gneiss
GW28	1505	39°05.200'	70°05.470'	Granite-gneiss
GW30	1461	39°02.759'	70°06.856'	Granite-gneiss
<u>Alai range</u>				
TS12a	4020	39°46.251'	73°37.066'	Granite
TS18a	2545	39°32.142'	72°06.190'	Diorite
TS20a	2700	39°33.771'	72°04.636'	Diorite
96TS1	1890	40°06.316'	73°31.692'	Weakly mylonitized granite
96TS2	1810	40°08.368'	73°30.315'	Deformed granite
TS6a	n.d.*	39°52.512'	73°22.294'	Sandstone (Miocene)
TS7a	2403	39°52.644'	73°22.724'	Sandstone (Miocene)
TS9a	2277	39°55.369'	73°26.068'	Red sandstone (early Cretaceous)

*n.d.—not determined.

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U* (ppm)	Pb** (ppm)	Th† U	^{206}Pb ^{204}Pb	$\frac{^{206}\text{Pb}^{\$}}{^{238}\text{U}}$ %	$^{207}\text{Pb}^{\$}$ ^{235}U %	$^{207}\text{Pb}^{\$}$ ^{206}Pb %	$\rho\text{ho}^{\#}$	^{206}Pb ^{238}U (Ma)	2 σ	^{207}Pb ^{235}U (Ma)	2 σ	^{207}Pb ^{206}Pb (Ma)	2 σ	conc %			
GW27																			
a1	2313	76	8	0.54	3807	0.0999	2.8	0.84	4.0	0.0611	2.9	0.69	614	16	620	19	643	62	96
a2	10468	103	19	0.26	943	0.1714	3.8	3.072	5.3	0.1300	3.7	0.72	1020	36	1426	41	2098	65	49
a3	1924	77	10	0.10	1508	0.1340	2.7	1.308	8.3	0.0708	7.8	0.33	811	21	849	49	951	161	85
a4	3188	250	11	0.03	6276	0.0463	2.8	0.33	4.1	0.0510	3.0	0.68	292	8	287	10	242	69	121
a5	839	24	2	0.11	1288	0.0936	3.1	0.85	6.9	0.0656	6.2	0.45	577	17	623	33	793	129	73
a7	4784	133	18	2.19	772	0.0903	4.1	0.74	8.7	0.0596	7.7	0.47	557	22	563	38	588	167	95
a8	1866	155	7	0.68	3574	0.0453	2.9	0.328	4.2	0.0525	3.1	0.68	286	8	288	11	307	71	93
a9	1972	158	7	0.37	3675	0.0451	2.9	0.336	5.4	0.0539	4.6	0.53	285	8	294	14	368	104	77
a10	2145	150	7	0.28	2591	0.0467	3.0	0.362	5.2	0.0562	4.3	0.57	294	9	313	14	460	94	64
a11	3952	329	14	0.07	3405	0.0453	3.1	0.328	4.4	0.05249	3.0	0.72	285	9	288	11	307	69	93
a12	4420	359	16	0.17	8152	0.0461	2.8	0.348	4.5	0.0547	3.6	0.61	290	8	303	12	400	81	73
a13	1604	147	7	0.28	2818	0.0464	3.4	0.32	5.5	0.0500	4.3	0.62	292	10	282	14	195	100	150
a14	884	33	4	1.43	1473	0.0916	2.8	0.77	7.1	0.0606	6.5	0.40	565	15	577	32	625	141	90
a15	9787	220	25	0.16	1198	0.1113	3.5	1.291	6.2	0.08416	5.1	0.57	680	23	842	36	1296	99	52
a16	2868	230	11	0.12	4669	0.0514	3.2	0.382	4.1	0.05386	2.6	0.78	323	10	328	12	365	59	88
a17	1758	114	5	0.26	727	0.0467	2.9	0.454	5.7	0.07048	4.9	0.51	294	8	380	18	942	101	31
a18	5492	109	18	0.60	7455	0.1582	2.9	1.624	4.3	0.0745	3.3	0.66	947	25	980	28	1054	66	90
a19	50407	341	99	0.36	41872	0.2782	2.7	4.606	3.0	0.12010	1.3	0.91	1582	38	1750	25	1958	23	81
a20	4977	191	18	0.39	8433	0.0955	2.7	0.783	3.8	0.0595	2.7	0.71	588	15	587	17	584	58	101
a21	15771	65	23	0.13	10565	0.3492	7.0	7.235	7.3	0.15026	2.0	0.96	1931	118	2141	67	2349	34	82
a22	4051	365	15	0.01	7761	0.0459	2.7	0.33	4.1	0.0524	3.1	0.66	289	8	290	10	302	70	96
a23	6054	252	24	0.83	9712	0.0820	2.9	0.71	4.0	0.0627	2.7	0.74	508	14	544	17	698	57	73
a24	248	9	1	1.84	408	0.1041	4.0	0.876	12.1	0.06104	11.4	0.33	638	24	639	59	641	246	100
a25	2132	187	9	0.01	3941	0.0531	3.2	0.402	5.7	0.0549	4.7	0.56	334	10	343	17	407	105	82
a26	1560	119	6	0.03	2820	0.0506	3.0	0.386	4.9	0.0554	3.9	0.61	318	9	332	14	427	87	75
a27	408	14	2	1.76	682	0.1122	3.2	0.93	10.3	0.0603	9.8	0.31	685	21	669	52	616	212	111
a28	2431	232	11	0.40	4630	0.0455	2.7	0.331	3.8	0.0527	2.7	0.71	287	8	290	10	318	60	90
a29	9929	817	41	0.13	2724	0.0521	2.6	0.42	3.7	0.0578	2.6	0.71	327	8	353	11	524	57	62
a30	10214	216	33	0.44	14291	0.1483	2.8	1.47	3.4	0.0719	2.0	0.82	891	23	918	21	983	40	91
a31	6216	591	24	0.01	11621	0.0445	2.7	0.33	3.7	0.0538	2.4	0.75	280	8	289	9	361	55	78
a32	908	33	3	0.48	1456	0.1009	3.3	0.88	7.1	0.0631	6.2	0.47	620	20	639	34	710	133	87
a33	33913	1013	145	0.79	51525	0.1290	2.7	1.18	2.9	0.0662	1.1	0.93	782	20	790	16	812	23	96
a34	31022	266	61	0.30	17083	0.2194	3.3	3.345	3.6	0.11055	1.5	0.91	1279	38	1492	29	1809	28	71
a35	30199	281	61	0.26	27457	0.2110	2.9	3.19	3.1	0.1098	1.1	0.94	1234	32	1456	24	1796	20	69
a36	11672	37	20	0.97	7097	0.4499	2.7	10.269	3.4	0.1655	2.0	0.79	2395	54	2459	32	2513	34	95
a37	5611	535	23	0.01	10827	0.0467	3.1	0.34	5.0	0.0523	3.9	0.62	294	9	295	13	297	90	99
a38	2016	49	7	0.79	2999	0.1330	3.5	1.242	5.0	0.0677	3.7	0.68	805	26	820	29	860	76	94
a41	2618	87	12	2.27	4413	0.0957	2.8	0.79	3.9	0.0597	2.8	0.70	589	16	590	18	594	61	99
a42	415	12	1	1.30	709	0.1053	3.5	0.856	7.6	0.0589	6.7	0.46	646	21	628	36	564	147	114
a43	3821	23	7	0.59	2285	0.3007	2.8	4.22	4.1	0.1017	3.0	0.68	1695	42	1677	35	1655	56	102
a44	2221	148	6	0.01	4283	0.0444	2.8	0.320	4.3	0.0523	3.3	0.65	280	8	282	11	297	74	94
a45	8537	19	8	0.74	3728	0.3618	3.0	8.698	4.1	0.1744	2.7	0.75	1991	52	2307	38	2600	45	77
a46	10463	128	15	0.05	8913	0.1152	3.4	1.878	4.0	0.1182	2.0	0.86	703	23	1073	27	1929	36	36
a48	4484	224	11	0.26	4569	0.0513	2.8	0.396	4.4	0.0560	3.3	0.65	322	9	339	13	451	74	71
a49	2885	149	6	0.22	5507	0.0452	2.9	0.328	4.5	0.0526	3.4	0.64	285	8	288	11	313	78	91
a50	3518	43	5	1.50	264	0.0844	3.1	1.350	4.9	0.1161	3.9	0.62	522	15	868	29	1897	70	28
a51	2303	95	6	0.09	3357	0.0637	3.3	0.467	4.9	0.0532	3.6	0.68	398	13	389	16	335	82	119
a52	2073	104	4	0.05	3875	0.0438	2.9	0.330	5.6	0.0547	4.8	0.52	277	8	290	14	399	107	69
a53	1224	23	3	2.25	1949	0.0950	4.3	0.827	7.2	0.0632	5.7	0.61	585	24	612	33	714	121	82
a54	2158	96	4	0.01	4174	0.0475	3.2	0.341	4.7	0.0521	3.5	0.66	299	9	298	12	290	81	103
a55	1309	23	3	1.34	2200	0.1070	3.3	0.883	5.9	0.0599	4.9	0.56	655	21	643	28	599	105	109
a56	3027	130	6	0.12	5805	0.0471	2.7	0.340	3.8	0.0524	2.7	0.69	297	8	297	10	302	63	98
a57	7974	94	9	0.15	8746	0.1006	3.6	1.271	4.4	0.0916	2.6	0.82	618	21	833	25	1460	49	42
a58	4953	200	9	0.09	9620	0.0488	3.0	0.347	4.4	0.0516	3.2	0.68	307	9	302	12	267	74	115
a59	712	11	1	1.19	1170	0.0969	3.0	0.820	7.8	0.0614	7.3	0.38	596	17	608	36	652	156	91
a60	2497	92	4	0.12	4795	0.0464	3.4	0.335	4.2	0.0523	2.4	0.81	292	10	293	11	299	56	98

TABLE DR 4. U-Pb GEOCHRONOLOGY

Spot number	^{207}Pb (cps)	U^* (ppm)	Pb^* (ppm)	Th^\dagger U	^{206}Pb ^{204}Pb	$^{206}\text{Pb}^{\$}$ ^{238}U	2σ %	$^{207}\text{Pb}^{\$}$ ^{235}U	2σ %	$^{207}\text{Pb}^{\$}$ ^{206}Pb	2σ %	$\text{rho}^{\#}$	^{206}Pb ^{238}U	2σ (Ma)	^{207}Pb ^{235}U	2σ (Ma)	^{207}Pb ^{206}Pb	2σ (Ma)	conc %	
<u>GW20</u>																				
a1	8157	770	35	0.01	9902	0.0492	2.9	0.36	4.0	0.0530	2.7	0.73	309	9	311	11	327	61	95	
a2	1202	90	4	0.36	2206	0.0450	4.0	0.329	9.4	0.0529	8.6	0.42	284	11	288	24	324	194	88	
a3	2948	304	15	0.17	902	0.0476	3.2	0.398	4.4	0.0606	3.0	0.73	300	9	340	13	624	64	48	
a4	997	82	4	0.28	1651	0.0507	3.0	0.42	6.7	0.0606	6.0	0.44	319	9	359	20	626	129	51	
a5	3381	291	15	0.25	6226	0.0489	3.0	0.37	4.2	0.0543	2.9	0.72	308	9	317	11	383	65	80	
a6	5689	568	25	0.02	10862	0.0481	2.8	0.349	4.3	0.0526	3.3	0.64	303	8	304	11	309	75	98	
a7	2468	251	12	0.18	4706	0.0476	2.7	0.34	4.1	0.0524	3.0	0.66	299	8	300	11	304	69	99	
a8	629	28	3	0.35	994	0.0827	4.3	0.723	8.1	0.0634	6.9	0.53	512	21	552	35	722	147	71	
a9	1689	65	8	0.66	2744	0.1045	3.0	0.885	5.4	0.0614	4.5	0.56	641	18	644	26	653	97	98	
a10	2537	281	13	0.35	2165	0.0424	3.4	0.316	5.4	0.0541	4.1	0.64	268	9	279	13	377	93	71	
a11	13284	1394	64	0.02	25600	0.0499	3.0	0.357	3.3	0.05196	1.5	0.89	314	9	310	9	284	34	111	
a12	18373	2132	86	0.02	13287	0.0439	2.9	0.310	3.5	0.0512	2.0	0.83	277	8	274	9	250	45	110	
a13	9487	58	26	0.48	7417	0.3988	3.5	7.00	4.0	0.1273	1.8	0.89	2163	65	2111	36	2061	32	105	
a14	1388	147	7	0.32	2620	0.0484	2.5	0.35	6.7	0.0528	6.2	0.38	305	8	307	18	321	141	95	
a15	4723	513	28	0.05	9244	0.0580	2.9	0.409	4.6	0.05114	3.6	0.62	364	10	348	14	247	84	147	
a16	353	16	2	0.55	568	0.1005	4.0	0.883	10.3	0.06372	9.5	0.39	617	24	643	50	732	201	84	
a17	1042	46	5	0.56	1737	0.0946	3.0	0.790	6.2	0.06059	5.4	0.49	583	17	591	28	625	116	93	
a18	4634	490	22	0.01	8783	0.0487	2.7	0.354	3.7	0.0528	2.5	0.74	307	8	308	10	319	57	96	
a19	8542	849	38	0.02	16135	0.0486	2.9	0.356	3.5	0.05307	2.0	0.82	306	9	309	9	332	45	92	
a20	1998	154	8	0.26	546	0.0457	3.1	0.475	6.1	0.0754	5.2	0.51	288	9	395	20	1080	104	27	
a21	1352	153	7	0.23	2549	0.0431	3.8	0.314	6.5	0.05291	5.3	0.59	272	10	278	16	325	119	84	
a22	1578	169	8	0.22	2811	0.0442	4.0	0.34	8.0	0.0559	7.0	0.50	279	11	298	21	449	154	62	
a23	866	36	4	0.32	1343	0.1024	4.4	0.91	7.9	0.0642	6.5	0.56	629	27	655	39	748	138	84	
a24	833	34	4	0.20	1344	0.1099	2.7	0.939	6.3	0.06199	5.7	0.43	672	17	673	31	674	121	100	
a25	831	88	5	0.23	1554	0.0517	3.3	0.382	6.6	0.0536	5.7	0.50	325	10	329	19	354	128	92	
a26	1974	86	11	0.71	3260	0.1115	2.9	0.929	4.9	0.0605	4.0	0.59	681	19	667	24	621	85	110	
a27	555	67	3	0.21	1067	0.0458	3.2	0.33	6.5	0.0519	5.6	0.50	289	9	288	16	282	129	102	
a28	1902	198	10	0.26	3645	0.0510	2.8	0.367	4.9	0.0522	4.0	0.58	321	9	317	13	294	91	109	
a29	1080	124	6	0.43	2097	0.0481	3.1	0.34	6.7	0.0509	6.0	0.46	303	9	295	17	238	138	127	
a30	7662	1133	43	0.00	875	0.0399	2.7	0.38	5.4	0.0684	4.7	0.50	252	7	325	15	880	97	29	
a31	1111	105	5	0.23	1926	0.0426	3.5	0.34	6.2	0.0579	5.1	0.57	269	9	297	16	526	111	51	
a32	2452	295	15	0.40	2127	0.0484	3.2	0.36	7.8	0.0535	7.2	0.40	304	9	310	21	348	162	87	
a33	7394	971	37	0.01	13967	0.0413	3.3	0.30	4.2	0.0530	2.6	0.78	261	9	268	10	327	60	80	
a34	1573	164	10	0.41	2883	0.0580	3.3	0.431	5.5	0.05398	4.3	0.61	363	12	364	17	370	98	98	
a35	4700	555	22	0.00	8579	0.0437	2.9	0.33	4.0	0.0548	2.7	0.73	276	8	290	10	403	61	68	
a36	1227	149	7	0.31	2396	0.0426	4.3	0.299	6.8	0.0509	5.3	0.63	269	11	265	16	235	122	114	
a37	598	72	4	0.39	1214	0.0457	2.8	0.31	7.6	0.0496	7.1	0.37	288	8	276	19	177	165	162	
a38	1565	167	9	0.31	3035	0.0504	2.7	0.358	5.0	0.0516	4.2	0.55	317	8	311	13	266	96	119	
a40	11278	1082	47	0.01	21537	0.0470	2.8	0.339	3.4	0.0523	2.0	0.82	296	8	297	9	299	45	99	
a41	5122	269	21	0.15	2070	0.0786	2.9	0.705	4.4	0.0651	3.3	0.66	488	14	542	19	777	70	63	
a42	1725	32	6	0.61	2395	0.1495	3.3	1.486	5.8	0.0721	4.7	0.57	898	28	925	36	989	96	91	
a43	55731	219	96	0.75	28087	0.3494	2.9	7.814	3.1	0.1622	1.0	0.94	1932	49	2210	28	2478	18	78	
a44	7439	622	26	0.04	8077	0.0454	2.6	0.331	3.9	0.0529	2.8	0.68	286	7	290	10	325	64	88	
a45	1572	107	5	0.30	2740	0.0488	3.2	0.382	6.9	0.0568	6.1	0.46	307	10	329	20	485	136	63	
a46	10137	751	26	0.01	1394	0.0361	3.3	0.327	4.3	0.0657	2.7	0.77	229	7	287	11	796	57	29	
a47	802	22	3	1.06	1312	0.1041	2.9	0.880	7.3	0.0613	6.7	0.40	638	18	641	35	649	143	98	
a48	1218	33	4	0.80	1874	0.0944	4.3	0.852	11.8	0.0654	10.9	0.37	582	24	626	56	788	230	74	
a49	12781	28	15	0.26	3968	0.4779	3.1	12.409	3.6	0.1883	1.9	0.85	2518	64	2636	34	2728	31	92	
a50	5434	347	16	0.03	10244	0.0489	3.8	0.358	4.7	0.0531	2.8	0.80	308	11	311	13	334	65	92	
a51	18827	76	29	0.67	8883	0.3012	3.9	5.318	4.2	0.1281	1.7	0.91	1697	58	1872	37	2072	30	82	
a52	15884	60	19	0.30	12464	0.2951	2.7	5.099	3.2	0.1253	1.7	0.85	1667	41	1836	28	2033	30	82	
a53	364	19	1	0.23	659	0.0481	3.4	0.371	8.7	0.0559	8.0	0.39	303	10	321	24	449	178	67	
a54	1131	23	3	0.37	1861	0.1106	2.9	0.926	5.9	0.0607	5.2	0.48	676	18	666	29	630	111	107	
a55	1190	60	3	0.28	1997	0.0432	3.2	0.339	6.2	0.0570	5.3	0.51	273	8	297	16	492	117	55	
a56	6511	355	14	0.01	12450	0.0444	3.3	0.320	4.1	0.0523	2.4	0.81	280	9	282	10	299	54	94	
a57	15833	927	46	0.02	29349	0.0543	4.2	0.400	4.8	0.0534	2.2	0.89	341	14	342	14	348	49	98	
a58	966	46	2	0.26	935	0.0464	3.2	0.337	6.2	0.0528	5.3	0.52	292	9	295	16	319	120	91	
a59	1327	62	3	0.62	2672	0.0449	3.2	0.307	6.4	0.0496	5.5	0.50	283	9	272	15	178			

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U^* (ppm)	Pb^* (ppm)	Th^\dagger U	^{206}Pb ^{204}Pb	$^{206}\text{Pb}^S$ ^{238}U	2σ %	$^{207}\text{Pb}^S$ ^{235}U	2σ %	$^{207}\text{Pb}^S$ ^{206}Pb	2σ %	$\rho\text{ho}^{\#}$	^{206}Pb ^{238}U	2σ (Ma)	^{207}Pb ^{235}U	2σ (Ma)	^{207}Pb ^{206}Pb	2σ (Ma)	conc %	
GW22																				
a1	1670	126	7	0.23	3005	0.0568	3.7	0.44	6.0	0.0557	4.7	0.62	356	13	368	19	441	106	81	
a2	4498	387	18	0.13	8695	0.0472	3.2	0.338	4.2	0.0520	2.7	0.76	297	9	296	11	284	63	105	
a3	7349	661	29	0.13	14391	0.0457	3.2	0.323	4.1	0.0512	2.6	0.78	288	9	284	10	250	59	115	
a4	672	57	3	0.23	1247	0.0466	3.5	0.35	7.5	0.0543	6.6	0.47	294	10	304	20	385	149	76	
a5	2021	171	8	0.18	2846	0.0450	3.9	0.33	5.2	0.0529	3.5	0.75	284	11	288	13	326	78	87	
a6	4860	440	21	0.18	9371	0.0490	3.0	0.352	3.9	0.0521	2.5	0.77	308	9	306	10	289	56	107	
a7	598	43	3	0.21	1023	0.0748	4.0	0.61	10.0	0.0587	9.2	0.40	465	18	481	39	555	200	84	
a8	1810	76	8	0.66	2971	0.0913	3.4	0.773	5.5	0.0614	4.3	0.61	563	18	581	25	654	93	86	
a9	9608	881	39	0.10	18500	0.0467	3.0	0.335	3.5	0.0521	1.8	0.86	294	9	294	9	289	41	102	
a10	3411	337	17	0.28	6585	0.0495	3.0	0.357	5.3	0.0522	4.4	0.56	312	9	310	14	294	100	106	
a11	1080	103	5	0.27	2079	0.0474	3.4	0.341	5.5	0.05214	4.4	0.61	298	10	298	14	292	100	102	
a12	17787	614	70	0.27	28427	0.1117	3.1	0.967	3.6	0.0628	1.8	0.87	683	20	687	18	702	39	97	
a13	1351	127	6	0.10	2562	0.0460	3.4	0.34	5.9	0.0529	4.8	0.57	290	10	294	15	325	109	89	
a14	14212	1424	61	0.09	27475	0.0449	3.1	0.32	3.5	0.0519	1.6	0.89	283	9	283	9	281	37	101	
a15	1109	71	5	0.17	1923	0.0630	3.6	0.505	6.6	0.05809	5.5	0.54	394	14	415	23	533	121	74	
a16	3395	334	15	0.14	6352	0.0464	3.0	0.343	4.3	0.05356	3.1	0.70	292	9	299	11	353	70	83	
a17	2544	250	12	0.26	3142	0.0451	3.0	0.318	4.5	0.05120	3.4	0.67	284	8	281	11	250	77	114	
a18	6278	346	11	0.08	304	0.0276	11.8	0.393	14.2	0.1032	8.0	0.83	175	20	336	42	1682	147	10	
a19	3445	319	13	0.10	6471	0.0413	3.2	0.305	4.7	0.05356	3.4	0.68	261	8	271	11	352	77	74	
a20	4341	112	19	0.15	3953	0.1702	3.3	2.474	11.0	0.1054	10.5	0.30	1013	31	1264	83	1721	193	59	
a21	6984	742	33	0.11	12967	0.0461	3.0	0.344	3.8	0.05413	2.3	0.80	291	9	300	10	376	51	77	
a22	2651	82	11	0.62	3930	0.1138	3.6	1.07	5.6	0.0684	4.3	0.65	695	24	740	30	881	88	79	
a23	7535	809	35	0.13	14330	0.0450	3.0	0.33	3.5	0.0527	1.8	0.86	284	8	287	9	318	41	89	
a24	5620	609	28	0.25	7828	0.0458	3.2	0.330	4.0	0.05223	2.4	0.80	289	9	289	10	295	55	98	
a25	4557	96	16	0.36	6179	0.1593	3.2	1.627	4.0	0.0741	2.4	0.80	953	28	981	25	1043	48	91	
a26	10973	659	45	0.09	1504	0.0693	3.0	0.644	3.9	0.0674	2.5	0.77	432	12	505	16	850	52	51	
a27	9986	1106	46	0.12	19098	0.0433	3.0	0.31	3.5	0.0525	1.9	0.85	273	8	277	9	305	42	90	
a28	5469	604	28	0.24	10547	0.0453	3.2	0.325	3.8	0.0521	2.0	0.85	285	9	286	9	289	46	99	
a29	6925	745	32	0.13	13155	0.0450	3.1	0.33	3.7	0.0529	2.0	0.84	284	9	288	9	323	46	88	
a30	5851	659	28	0.15	11301	0.0442	3.2	0.32	4.1	0.0520	2.5	0.78	279	9	279	10	284	58	98	
a31	2877	316	14	0.12	5761	0.0478	3.1	0.33	5.4	0.0505	4.4	0.59	301	9	292	14	218	101	138	
a32	17626	2014	96	0.10	33290	0.0501	3.0	0.37	3.4	0.0532	1.5	0.90	315	9	318	9	337	33	93	
a33	2223	234	12	0.26	3422	0.0483	3.1	0.37	4.4	0.0559	3.2	0.69	304	9	322	12	449	71	68	
a34	5613	603	27	0.11	10714	0.0464	3.1	0.337	4.1	0.05271	2.7	0.75	292	9	295	11	316	62	92	
a35	2278	115	9	0.25	3697	0.0756	3.5	0.64	5.2	0.0618	3.9	0.68	470	16	505	21	668	83	70	
a36	4777	522	23	0.14	9114	0.0461	3.1	0.334	3.7	0.0526	2.1	0.83	290	9	292	9	310	47	94	
a37	2417	220	10	0.26	1314	0.0459	3.2	0.38	5.5	0.0597	4.5	0.58	289	9	325	16	592	98	49	
a38	23865	2493	100	0.07	11924	0.0424	3.2	0.307	3.6	0.0526	1.6	0.90	268	8	272	9	311	36	86	
a39	3852	197	15	0.41	3280	0.0623	3.2	0.510	5.5	0.0593	4.4	0.59	390	12	418	19	579	96	67	
a40	5370	481	23	0.29	6929	0.0469	3.1	0.342	4.1	0.0530	2.6	0.77	295	9	299	11	327	59	90	
a41	1514	113	6	0.26	1352	0.0505	3.6	0.37	6.8	0.0526	5.8	0.52	318	11	317	19	311	132	102	
a42	6334	507	22	0.17	11814	0.0444	3.3	0.330	4.2	0.0539	2.7	0.78	280	9	289	11	366	60	77	
a43	5299	204	23	0.93	9015	0.0850	3.6	0.69	5.2	0.0590	3.8	0.69	526	18	534	22	567	82	93	
a44	5238	391	18	0.09	10133	0.0487	3.0	0.349	3.9	0.0519	2.5	0.76	307	9	304	10	281	58	109	
a45	892	61	3	0.22	1753	0.0483	3.7	0.340	6.0	0.0510	4.8	0.61	304	11	297	16	242	110	126	
a46	5351	393	16	0.07	10100	0.0441	3.0	0.323	3.8	0.0530	2.4	0.77	278	8	284	10	331	55	84	
a47	1878	90	4	0.20	1179	0.0474	7.2	0.451	11.7	0.0690	9.2	0.61	298	21	378	38	899	191	33	
a48	4281	237	11	0.11	8253	0.0486	3.2	0.348	4.3	0.0519	2.9	0.73	306	9	303	11	282	67	109	
a49	16840	207	38	0.51	23626	0.1599	3.2	1.570	3.5	0.0712	1.3	0.93	956	29	958	22	963	27	99	
a50	5514	302	14	0.11	5800	0.0465	3.1	0.342	3.9	0.0534	2.4	0.79	293	9	299	10	344	54	85	
a51	3237	171	8	0.13	5935	0.0460	3.3	0.348	4.5	0.0549	3.0	0.74	290	9	303	12	407	67	71	
a52	3425	55	12	0.52	5218	0.2030	3.6	1.846	5.2	0.0660	3.7	0.70	1191	40	1062	35	805	78	148	
a53	8677	446	21	0.18	16878	0.0485	3.1	0.345	3.7	0.0516	1.9	0.86	305	9	301	10	268	43	114	
a54	2931	135	7	0.29	5513	0.0482	3.3	0.355	4.2	0.0535	2.6	0.78	304	10	309	11	348	59	87	
a55	7678	362	16	0.12	14686	0.0459	3.0	0.332	3.6	0.0525	2.1	0.82	289	8	291	9	306	47	94	
a56	1774	80	4	0.16	3422	0.0512	3.8	0.368	5.2	0.0521	3.6	0.73	322	12	318	14	289	82	111	
a57	5763	252	12	0.19	10942	0.0490	3.2	0.357	3.9	0.0529	2.1	0.83	308	10	310	10	325	48	95	
a58	21819	970	42	0.02	42467	0.0467	3.1	0.332	3.6	0.0516	1.9	0.85	294	9</td						

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U* (ppm)	Pb** (ppm)	Th† U	^{206}Pb ^{204}Pb	$\frac{^{206}\text{Pb}^{\$}}{^{238}\text{U}}$ %	2 σ %	$^{207}\text{Pb}^{\$}$ ^{235}U	2 σ %	$^{207}\text{Pb}^{\$}$ ^{206}Pb	2 σ %	$\rho\text{ho}^{\#}$	^{206}Pb ^{238}U	2 σ (Ma)	^{207}Pb ^{235}U	2 σ (Ma)	^{207}Pb ^{206}Pb	2 σ (Ma)	conc %
GW23																			
a1	4008	118	15	1.17	6609	0.1059	2.2	0.88	4.1	0.0605	3.4	0.54	649	14	643	20	622	74	104
a2	9509	284	29	0.23	15488	0.1046	2.2	0.886	3.2	0.0614	2.3	0.70	641	14	644	15	654	49	98
a3	2859	84	10	0.54	4665	0.1131	2.2	0.959	4.8	0.0615	4.2	0.46	691	14	683	24	656	91	105
a4	3379	258	11	0.01	6361	0.0478	2.2	0.35	3.2	0.0532	2.4	0.67	301	6	305	8	336	53	90
a5	6932	163	22	0.80	3883	0.1181	3.0	1.09	3.9	0.0669	2.5	0.76	720	20	748	21	833	53	86
a6	1732	38	6	0.88	2687	0.1380	2.1	1.224	5.0	0.0643	4.5	0.43	833	17	812	28	753	94	111
a7	3319	255	11	0.01	6384	0.0488	2.1	0.35	4.6	0.0519	4.1	0.46	307	6	304	12	280	93	110
a8	1215	33	5	1.80	2039	0.1141	2.9	0.936	6.6	0.0595	6.0	0.44	697	19	671	33	584	130	119
a9	4926	230	16	0.27	4121	0.0671	2.1	0.542	2.7	0.0586	1.7	0.77	419	9	440	10	552	38	76
a10	8645	141	22	0.21	11924	0.1606	2.0	1.603	2.7	0.0724	1.8	0.75	960	18	971	17	996	36	96
a11	830	5	2	2.01	812	0.3385	5.1	4.814	8.4	0.10314	6.7	0.60	1879	84	1787	74	1681	124	112
a12	1355	28	5	1.15	2138	0.1576	2.1	1.371	4.8	0.0631	4.4	0.43	943	18	876	29	711	93	133
a13	2895	192	8	0.06	2152	0.0440	2.9	0.38	5.5	0.0632	4.7	0.52	277	8	329	16	716	100	39
a14	265	7	1	0.88	462	0.1182	5.2	0.93	11.8	0.0572	10.6	0.44	720	35	669	59	499	233	144
a15	3356	261	12	0.01	6519	0.0499	2.1	0.353	3.6	0.05131	3.0	0.58	314	6	307	10	255	68	123
a16	1440	115	6	0.61	2897	0.0468	3.3	0.323	5.9	0.04997	4.9	0.56	295	10	284	15	194	113	152
a17	5185	411	18	0.02	9849	0.0479	2.3	0.346	4.0	0.05238	3.3	0.57	302	7	302	11	302	75	100
a18	835	23	3	0.75	1385	0.1171	2.4	0.971	7.8	0.0602	7.4	0.31	714	17	689	40	610	160	117
a19	2953	80	9	0.24	4832	0.1167	2.2	0.980	4.4	0.06091	3.8	0.50	711	15	694	23	636	83	112
a20	2493	228	10	0.01	5022	0.0488	2.3	0.334	7.6	0.0497	7.3	0.31	307	7	293	20	182	169	169
a21	3055	230	11	0.16	5744	0.0523	2.2	0.383	3.4	0.05311	2.6	0.64	329	7	329	10	333	60	99
a22	1041	78	4	0.54	1960	0.0497	3.2	0.36	5.5	0.0530	4.5	0.57	313	10	315	15	330	103	95
a23	1419	119	6	0.36	2845	0.0467	2.4	0.32	5.1	0.0499	4.5	0.48	294	7	283	13	188	104	156
a24	4688	26	9	0.79	4152	0.3106	2.9	4.848	4.5	0.11321	3.4	0.65	1744	45	1793	39	1852	62	94
a25	2434	196	9	0.05	4597	0.0519	2.5	0.378	4.4	0.0529	3.6	0.57	326	8	326	12	324	83	101
a26	545	12	2	0.72	727	0.1272	3.5	1.312	7.8	0.0748	6.9	0.45	772	26	851	46	1064	140	73
a27	3553	270	13	0.01	6264	0.0532	2.2	0.39	3.8	0.0535	3.1	0.58	334	7	336	11	351	70	95
a28	8353	195	29	0.41	12349	0.1455	2.1	1.355	3.1	0.0676	2.3	0.68	875	17	870	19	855	48	102
a29	2678	218	10	0.01	5088	0.0525	2.1	0.38	3.8	0.0527	3.2	0.54	330	7	328	11	315	73	105
a30	3024	233	11	0.01	5644	0.0516	1.8	0.38	3.8	0.0535	3.3	0.49	325	6	328	11	349	74	93
a31	2690	42	7	0.45	3304	0.1695	4.0	1.78	7.7	0.0762	6.6	0.52	1009	37	1038	51	1100	132	92
a32	4604	37	12	0.69	3998	0.2960	2.0	4.69	3.9	0.1148	3.4	0.50	1672	29	1765	33	1877	62	89
a33	3281	256	11	0.02	6213	0.0474	2.4	0.34	3.7	0.0527	2.9	0.64	298	7	300	10	315	65	95
a34	2304	186	9	0.01	4408	0.0519	2.0	0.374	4.2	0.05220	3.7	0.48	326	6	322	12	294	85	111
a35	4678	23	8	0.30	3837	0.3378	2.5	5.67	4.1	0.1218	3.2	0.62	1876	42	1928	36	1983	57	95
a36	2987	257	12	0.02	5611	0.0493	2.4	0.362	3.7	0.0532	2.8	0.65	310	7	313	10	336	64	92
a37	692	20	3	1.42	1008	0.1045	2.8	1.02	9.2	0.0710	8.8	0.31	641	17	715	49	958	180	67
a38	511	14	2	2.05	803	0.0935	4.9	0.829	12.5	0.0643	11.5	0.39	576	27	613	59	753	242	77
a39	7474	224	18	0.01	5994	0.0854	3.2	0.745	5.0	0.0633	3.8	0.65	528	16	565	22	718	82	74
a40	3495	53	11	1.35	4720	0.1731	1.9	1.765	4.2	0.0740	3.7	0.45	1029	18	1033	27	1040	75	99

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U* (ppm)	Pb** (ppm)	Th† U	^{206}Pb ^{204}Pb	$\frac{^{206}\text{Pb}^{\$}}{^{238}\text{U}}$ %	2 σ %	$^{207}\text{Pb}^{\$}$ ^{235}U	2 σ %	$^{207}\text{Pb}^{\$}$ ^{206}Pb	2 σ %	$\rho\text{ho}^{\#}$	^{206}Pb ^{238}U	2 σ (Ma)	^{207}Pb ^{235}U	2 σ (Ma)	^{207}Pb ^{206}Pb	2 σ (Ma)	conc %
GW25																			
a1	9937	323	33	0.06	16192	0.1068	2.1	0.90	2.6	0.0614	1.6	0.80	654	13	654	13	653	34	100
a2	2365	91	9	0.33	4002	0.0989	2.3	0.805	4.1	0.0591	3.4	0.57	608	14	600	19	569	74	107
a3	10017	415	37	0.16	16949	0.0895	2.2	0.730	2.8	0.0592	1.6	0.81	552	12	557	12	575	35	96
a4	5679	241	21	0.11	9191	0.0902	2.7	0.77	4.4	0.0619	3.6	0.60	557	14	579	20	670	76	83
a5	901	36	4	0.40	1510	0.0903	3.3	0.74	6.6	0.0598	5.7	0.50	557	18	565	29	598	123	93
a6	12851	73	30	0.68	10949	0.3374	2.2	5.468	2.6	0.1175	1.5	0.83	1874	35	1896	23	1919	26	98
a7	2378	228	9	0.00	4617	0.0455	2.3	0.32	4.1	0.0515	3.4	0.56	287	6	284	10	261	79	110
a8	2689	103	13	0.83	4430	0.0983	2.4	0.823	3.8	0.0607	3.0	0.62	605	14	610	18	629	64	96
a9	4390	176	22	0.92	7359	0.0957	2.4	0.788	3.4	0.0598	2.4	0.70	589	14	590	15	595	52	99
a10	2581	84	10	0.44	4153	0.1091	2.2	0.931	3.9	0.0619	3.3	0.56	667	14	668	19	672	70	99
a11	2688	111	12	0.45	4569	0.0989	2.2	0.803	3.5	0.05891	2.7	0.62	608	13	599	16	564	60	108
a12	10752	508	42	0.09	12501	0.0869	2.1	0.712	3.4	0.0594	2.6	0.64	537	11	546	14	580	56	93
a13	25351	68	39	0.56	13804	0.4630	2.3	11.73	2.6	0.1837	1.3	0.87	2453	47	2583	25	2687	21	91
a14	11935	58	19	0.24	7492	0.3011	2.8	6.61	3.5	0.1593	2.1	0.80	1697	42	2061	32	2449	36	69
a15	1540	62	7	0.54	2531	0.0981	2.3	0.824	5.1	0.06093	4.6	0.45	603	13	610	24	637	99	95
a16	5666	245	21	0.12	9381	0.0887	2.3	0.740	3.4	0.06053	2.5	0.67	548	12	562	15	622	55	88
a17	1308	32	6	0.69	1942	0.1514	2.6	1.407	5.4	0.06743	4.8	0.49	909	22	892	33	851	99	107
a18	16503	79	34	0.29	12107	0.3857	2.2	7.248	2.8	0.1363	1.7	0.79	2103	40	2142	25	2181	29	96
a19	25045	68	38	0.35	14100	0.4810	2.3	11.791	2.6	0.17779	1.4	0.85	2531	47	2588	25	2632	23	96
a20	363	12	2	0.64	553	0.1117	3.9	1.020	11.6	0.0663	10.9	0.33	682	25	714	61	815	228	84
a21	1543	65	7	0.57	2330	0.0995	2.2	0.818	4.3	0.05964	3.6	0.53	612	13	607	20	590	78	104
a22	419	17	2	0.43	688	0.1117	3.5	0.95	9.7	0.0614	9.0	0.36	683	22	676	49	652	194	105
a23	982	106	4	0.01	1769	0.0450	2.4	0.34	6.0	0.0549	5.5	0.40	284	7	298	16	408	124	69
a24	3434	75	16	0.96	4647	0.1607	2.3	1.639	3.7	0.07396	2.9	0.62	961	20	985	24	1041	58	92
a25	2978	85	14	0.65	4422	0.1358	2.1	1.262	4.0	0.0674	3.3	0.54	821	17	829	23	851	70	96
a26	1357	37	6	0.56	2002	0.1430	2.5	1.341	5.7	0.0680	5.1	0.44	861	20	864	34	869	106	99
a27	771	30	3	0.40	1188	0.0976	2.8	0.88	6.2	0.0652	5.5	0.46	600	16	639	30	780	116	77
a28	1137	55	6	0.60	1982	0.0927	2.6	0.735	6.2	0.0575	5.6	0.42	571	14	559	27	510	123	112
a29	1325	44	6	0.38	2068	0.1232	2.4	1.09	5.7	0.0640	5.2	0.41	749	17	747	31	742	110	101
a30	1610	93	8	0.57	2736	0.0748	2.3	0.61	5.0	0.0590	4.4	0.47	465	11	482	19	565	96	82
a31	1545	42	6	0.35	2272	0.1437	2.6	1.35	5.6	0.0680	4.9	0.47	866	21	867	33	869	102	100
a32	5619	131	23	0.35	7761	0.1624	2.2	1.63	3.4	0.0726	2.6	0.65	970	20	980	22	1003	52	97
a33	931	44	5	0.85	1542	0.0956	3.0	0.80	8.4	0.0603	7.9	0.35	588	17	594	39	616	170	96
a34	10768	68	27	0.68	933	0.3045	2.2	5.155	4.0	0.12281	3.3	0.56	1713	34	1845	35	1997	59	86
a35	2609	144	14	0.62	4432	0.0858	2.2	0.70	3.4	0.0589	2.5	0.66	530	11	536	14	562	55	94
a36	2734	113	12	0.26	4326	0.1058	2.5	0.922	3.7	0.0632	2.7	0.67	648	15	664	18	716	57	91
a37	5485	626	24	0.00	10298	0.0419	2.4	0.31	3.4	0.0532	2.3	0.73	265	6	272	8	337	52	79
a38	28413	196	69	0.55	23324	0.2944	2.1	4.945	2.6	0.1218	1.4	0.83	1663	32	1810	22	1983	25	84
a40	1400	25	5	0.48	1990	0.1619	2.7	1.568	5.8	0.0702	5.2	0.46	967	24	958	37	936	106	103
a41	2733	245	11	0.00	5295	0.0490	2.2	0.349	3.9	0.0516	3.2	0.57	309	7	304	10	270	73	114
a42	18460	82	33	0.51	14007	0.3452	2.5	6.277	2.9	0.1319	1.5	0.86	1912	41	2015	26	2123	26	90
a43	5987	165	16	0.05	6941	0.0967	2.5	1.134	3.8	0.0851	2.8	0.67	595	14	770	21	1317	55	45
a44	1825	55	5	0.28	1049	0.0821	2.8	0.834	5.1	0.0736	4.3	0.55	509	14	616	24	1031	87	49
a45	1532	47	5	0.49	2516	0.0887	2.4	0.744	4.4	0.0608	3.7	0.54	548	13	565	19	632	81	87
a46	14159	45	16	0.10	8726	0.3445	3.2	7.724	3.8	0.1626	2.0	0.85	1909	53	2199	35	2483	33	77
a47	960	26	3	0.44	1546	0.1020	3.0	0.879	6.5	0.0625	5.8	0.46	626	18	641	31	692	123	90
a48	1766	48	5	0.60	2819	0.0897	2.6	0.776	4.7	0.0628	4.0	0.55	554	14	583	21	701	84	79
a49	733	20	2	0.62	1276	0.0918	2.8	0.729	6.6	0.0576	6.0	0.42	566	15	556	29	514	132	110
a50	18435	66	25	0.41	15257	0.3413	2.1	5.692	2.6	0.1210	1.5	0.82	1893	34	1930	22	1970	26	96
a51	10118	321	22	0.03	1781	0.0720	2.3	0.650	3.9	0.0654	3.1	0.59	448	10	508	16	788	65	57
a52	860	14	2	0.75	651	0.0996	4.2	1.087	16.8	0.0792	16.3	0.25	612	25	747	93	1176	322	52
a53	2008	114	5	0.00	3939	0.0435	3.3	0.305	7.1	0.0509	6.3	0.46	274	9	270	17	236	145	116
a54	27109	50	26	0.35	17268	0.4561	2.4	9.848	2.8	0.1566	1.3	0.89	2422	49	2421	26	2419	22	100
a55	8835	17	7	0.12	5741	0.3819	2.3	8.107	2.9	0.1540	1.7	0.80	2085	41	2243	26	2390	29	87
a56	6043	9	5	0.22	3860	0.4747	2.6	10.270	3.5	0.1569	2.3	0.76	2504	55	2459	33	2423	38	103
a57	6751	13	6	0.38	4603	0.4115	2.9	8.224	3.8	0.1450	2.5	0.75	2222	54	2256	35	2287	44	97
a58	10583	203	21	0.17	17821	0.1038	2.3	0.851	3.0	0.0595	2.0	0.75	636	14	625	14	585	43	109
a59	537	9	1	0.35	762	0.0884	4.8	0.856	11.9	0.0703	10.9	0.40	546	25	628	57	936	223	58
a60	5668	246	10	0.01	8870	0.													

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U (ppm)	Pb^+ (ppm)	Th^\dagger U	^{206}Pb ^{204}Pb	$^{206}\text{Pb}^S$ ^{238}U	2 σ %	$^{207}\text{Pb}^S$ ^{235}U	2 σ %	$^{207}\text{Pb}^S$ ^{206}Pb	2 σ %	$\rho\text{ho}^{\#}$	^{206}Pb ^{238}U	2 σ (Ma)	^{207}Pb ^{235}U	2 σ (Ma)	^{207}Pb ^{206}Pb	2 σ (Ma)	conc %	
GW28																				
a1	1747	126	8	0.23	3030	0.0634	3.2	0.51	6.8	0.0579	6.0	0.47	396	12	416	23	525	131	76	
a2	4486	377	17	0.14	8658	0.0474	2.7	0.342	3.8	0.0522	2.7	0.70	299	8	298	10	295	62	101	
a3	4745	392	17	0.14	6109	0.0444	3.4	0.315	5.7	0.0515	4.5	0.59	280	9	278	14	264	104	106	
a4	699	60	3	0.24	1305	0.0464	3.2	0.35	7.6	0.0541	7.0	0.42	292	9	302	20	375	156	78	
a5	690	58	3	0.24	1271	0.0469	3.2	0.36	7.5	0.0550	6.7	0.43	296	9	309	20	412	151	72	
a6	1844	158	7	0.17	2402	0.0436	3.6	0.320	5.3	0.0531	3.8	0.68	275	10	282	13	334	87	82	
a7	4908	435	21	0.18	9411	0.0494	2.5	0.36	3.6	0.0525	2.6	0.70	311	8	310	10	307	59	101	
a8	598	42	3	0.21	1023	0.0754	3.6	0.612	9.9	0.0589	9.2	0.37	469	17	485	39	562	199	83	
a9	1795	75	8	0.67	3002	0.0920	3.0	0.766	4.9	0.0604	4.0	0.60	567	16	577	22	616	86	92	
a10	9779	891	40	0.10	18820	0.0475	2.6	0.342	3.1	0.0523	1.8	0.82	299	8	299	8	297	41	101	
a11	2358	208	13	0.13	3868	0.0651	2.9	0.465	7.4	0.05180	6.8	0.40	407	12	388	24	277	155	147	
a12	1079	102	5	0.27	2099	0.0475	3.0	0.339	5.0	0.0518	3.9	0.60	299	9	296	13	275	90	109	
a13	17136	585	66	0.27	27352	0.1098	2.7	0.96	3.2	0.0631	1.7	0.85	672	17	681	16	711	36	94	
a14	1441	141	6	0.10	2734	0.0454	3.5	0.33	8.2	0.0531	7.5	0.42	286	10	291	21	332	169	86	
a15	14360	1521	63	0.09	28194	0.0441	2.6	0.312	3.0	0.05129	1.4	0.88	278	7	275	7	254	32	110	
a16	1111	71	5	0.17	1924	0.0639	3.1	0.514	6.2	0.05831	5.4	0.50	399	12	421	22	541	118	74	
a17	3651	357	16	0.14	6733	0.0466	2.6	0.351	3.9	0.05460	2.9	0.66	294	7	305	10	396	65	74	
a18	2253	238	11	0.25	4479	0.0447	2.6	0.312	4.7	0.0507	4.0	0.55	282	7	276	12	226	92	125	
a19	3931	380	15	0.12	7510	0.0412	2.9	0.299	4.7	0.05275	3.7	0.61	260	7	266	11	318	84	82	
a20	5904	113	23	0.16	4823	0.1992	2.6	3.370	9.1	0.1227	8.8	0.28	1171	27	1497	74	1996	156	59	
a21	7176	770	34	0.10	13334	0.0467	2.5	0.349	3.4	0.05422	2.4	0.73	294	7	304	9	380	53	77	
a22	2717	81	11	0.64	4102	0.1145	3.2	1.06	5.2	0.0671	4.1	0.62	699	21	734	28	841	86	83	
a23	7535	798	35	0.13	14330	0.0452	2.5	0.33	3.1	0.0529	1.8	0.81	285	7	290	8	325	41	88	
a24	5914	617	30	0.26	11336	0.0482	2.8	0.349	3.6	0.05254	2.3	0.77	304	8	304	9	309	52	98	
a25	4556	96	17	0.35	6192	0.1613	2.7	1.649	3.7	0.0741	2.5	0.73	964	24	989	23	1045	51	92	
a26	11014	665	45	0.09	1694	0.0689	2.5	0.632	3.7	0.0666	2.7	0.68	429	10	497	15	824	56	52	
a27	9945	1093	46	0.12	19090	0.0436	2.5	0.32	3.2	0.0524	1.9	0.79	275	7	278	8	304	44	91	
a28	5510	597	27	0.24	10657	0.0452	2.8	0.325	3.4	0.0521	1.9	0.83	285	8	285	9	289	44	99	
a29	6981	727	32	0.14	13291	0.0446	2.6	0.33	3.2	0.0528	1.9	0.81	281	7	286	8	322	43	87	
a30	5836	648	28	0.15	11263	0.0446	2.7	0.32	3.6	0.0522	2.4	0.74	281	7	283	9	293	55	96	
a32	17782	2005	86	0.10	33802	0.0448	3.4	0.33	3.8	0.0530	1.6	0.90	282	9	288	10	329	37	86	
a33	2032	204	10	0.24	3635	0.0504	2.6	0.39	4.3	0.0565	3.4	0.61	317	8	336	12	470	76	67	
a34	5665	619	27	0.11	10674	0.0456	2.7	0.335	3.6	0.05337	2.3	0.76	287	8	294	9	345	53	83	
a35	2116	100	8	0.28	3593	0.0695	3.7	0.57	5.9	0.0592	4.6	0.63	433	16	456	22	573	99	76	
a36	4770	525	23	0.14	9182	0.0458	2.6	0.330	3.4	0.0523	2.2	0.76	289	7	290	9	297	50	97	
a37	2764	257	12	0.26	1359	0.0459	2.9	0.38	6.2	0.0604	5.5	0.46	289	8	329	18	618	119	47	
a38	22771	2282	96	0.07	10809	0.0447	2.7	0.325	3.2	0.0528	1.7	0.85	282	8	286	8	322	39	88	
a39	3805	189	14	0.42	4359	0.0630	2.8	0.554	5.6	0.0638	4.8	0.51	394	11	448	20	735	101	54	
a40	5381	474	23	0.29	6915	0.0475	2.7	0.349	3.8	0.0533	2.7	0.70	299	8	304	10	343	61	87	
a41	2265	191	9	0.31	4230	0.0435	2.8	0.322	4.5	0.0537	3.5	0.63	274	8	283	11	357	79	77	
a42	4827	366	20	0.14	5569	0.0575	2.9	0.414	4.5	0.0523	3.5	0.63	360	10	352	14	299	80	120	
a43	5149	186	22	0.99	8723	0.0859	3.3	0.702	4.4	0.0593	2.9	0.75	531	17	540	19	578	63	92	
a44	5274	387	18	0.09	10208	0.0489	2.5	0.351	3.6	0.0520	2.6	0.70	308	8	305	10	286	59	107	
a45	891	60	3	0.22	1739	0.0485	3.3	0.345	6.0	0.0516	5.0	0.55	305	10	301	16	269	114	113	
a46	6478	451	19	0.07	12362	0.0450	2.5	0.326	3.5	0.0526	2.4	0.72	283	7	286	9	311	55	91	
a47	2386	134	6	0.17	4171	0.0475	2.8	0.382	5.8	0.0584	5.0	0.49	299	8	329	16	544	110	55	
a48	4464	238	12	0.10	8515	0.0511	2.7	0.370	4.3	0.0525	3.3	0.63	321	8	320	12	309	76	104	
a49	17043	208	38	0.52	23915	0.1588	2.8	1.566	3.3	0.0715	1.7	0.86	950	25	957	21	972	34	98	
a50	5533	303	14	0.11	5978	0.0464	2.6	0.344	3.5	0.0539	2.3	0.75	292	8	300	9	365	51	80	
a51	3361	179	8	0.13	6185	0.0458	2.8	0.348	4.1	0.0551	2.9	0.70	289	8	303	11	416	65	69	
a52	3359	46	9	0.63	4959	0.1675	2.9	1.575	5.0	0.0682	4.1	0.58	998	27	960	32	874	85	114	
a53	8703	442	21	0.18	16907	0.0487	2.7	0.348	3.3	0.0518	1.9	0.82	306	8	303	9	277	43	110	
a54	3000	141	7	0.28	5632	0.0474	2.9	0.351	3.8	0.0537	2.5	0.75	299	8	306	10	360	57	83	
a55	7627	360	16	0.12	14647	0.0460	2.5	0.332	3.3	0.0524	2.2	0.75	290	7	291	8	304	50	95	
a56	1757	79	4	0.16	3387	0.0515	3.3	0.371	4.8	0.0523	3.5	0.69	324	11	321	13	297	80	109	
a57	5754	247	13	0.19	10848	0.0515	2.6	0.380	3.5	0.0535	2.3	0.74	324	8	327	10	350	53	93	
a58	21380	938	40	0.02	41299	0.0466	2.6	0.335	3.1	0.0521	1.7	0.83	293	7	293	8	291	39	101	
a59	1925	31	3	0.27	3141	0.0838	3.6	0.713	5.3	0.0617	3.9	0.68	519	18	547	22	664	83	78	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U* (ppm)	Pb* (ppm)	Th^{\dagger} U	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^{\ddagger}}{^{238}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^{\ddagger}}{^{235}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^{\ddagger}}{^{206}\text{Pb}}$ %	2σ	$\rho_{\text{ho}}^{\#}$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ (Ma)	2σ	conc %	
6910D1																				
3	6834	121	11	0.24	129456	0.0914	0.5	0.76	0.7	0.0603	0.4	0.76	564	6	574	6	615	19	92	
4	8246	325	15	0.31	175278	0.0474	0.6	0.343	0.8	0.0525	0.5	0.78	299	3	300	4	306	21	98	
5	19597	785	35	0.21	431448	0.0473	0.6	0.339	0.7	0.0520	0.4	0.80	298	3	297	4	286	19	104	
6	9279	377	17	0.24	202849	0.0466	0.5	0.34	0.7	0.0523	0.4	0.78	293	3	294	4	297	20	99	
7	9782	391	17	0.19	213383	0.0470	0.4	0.34	0.6	0.0524	0.4	0.69	296	2	297	3	305	19	97	
8	4271	175	8	0.24	26111	0.0460	0.5	0.331	0.7	0.0522	0.5	0.70	290	3	290	4	293	23	99	
9	3269	128	6	0.31	68773	0.0462	0.7	0.34	0.9	0.0538	0.6	0.80	291	4	299	5	361	25	81	
11	6814	342	31	0.02	2199	0.1006	3.1	0.746	3.3	0.0538	1.1	0.95	618	37	566	28	362	47	171	
12	21003	2477	110	0.10	6153	0.0482	3.2	0.343	3.4	0.0516	1.0	0.95	304	19	299	17	266	47	114	
13	15661	1944	83	0.10	7233	0.0461	3.3	0.325	3.4	0.0511	1.0	0.95	291	19	286	17	246	48	118	
14	21000	2520	109	0.08	7996	0.0474	3.2	0.339	3.4	0.0519	1.0	0.95	298	19	296	17	280	47	107	
15	26767	2867	123	0.10	1519	0.0459	3.4	0.333	3.6	0.05271	1.2	0.94	289	19	292	18	316	54	91	
16	36720	6977	161	0.04	823	0.0218	3.4	0.160	3.6	0.0531	1.1	0.95	139	9	151	10	335	48	42	
17	20473	2568	105	0.06	13028	0.0445	3.2	0.33	3.3	0.0531	1.1	0.95	281	17	286	17	333	47	84	
18	17022	2282	89	0.06	365724	0.0432	3.2	0.32	3.4	0.0531	1.0	0.95	273	17	279	16	334	47	82	
19	27184	3944	129	0.02	3038	0.0375	4.1	0.276	4.3	0.05333	1.1	0.97	237	19	247	19	343	50	69	
30	12854	605	25	0.07	278753	0.0464	0.5	0.334	0.6	0.05210	0.3	0.86	293	3	292	3	290	14	101	
31	173919	330	129	0.10	432952	0.3881	0.7	8.307	0.7	0.15525	0.3	0.93	2114	25	2265	13	2405	10	88	
32	3152	149	7	0.20	68667	0.0465	0.6	0.333	0.7	0.05193	0.5	0.78	293	3	292	4	283	21	104	
33	2596	123	6	0.31	56162	0.0462	0.6	0.333	0.7	0.0523	0.4	0.83	291	3	292	4	296	18	98	
34	2777	128	6	0.30	17353	0.0464	0.7	0.338	1.4	0.05288	1.2	0.52	292	4	296	7	324	52	90	
35	4239	200	9	0.28	91143	0.0458	0.6	0.331	0.7	0.0525	0.3	0.86	289	3	291	3	308	16	94	
36	4027	192	9	0.31	87021	0.0462	0.6	0.332	0.7	0.05213	0.4	0.86	291	3	291	4	291	16	100	
37	4343	205	9	0.23	94727	0.0466	0.6	0.34	0.7	0.0523	0.4	0.81	294	3	294	4	297	19	99	
38	6422	293	21	1.30	18723	0.0469	0.6	0.34	0.7	0.0522	0.4	0.86	295	4	295	4	296	17	100	
39	3117	144	6	0.22	66996	0.0465	0.6	0.338	0.8	0.05279	0.4	0.81	293	4	296	4	320	20	92	
20	20543	2690	104	0.07	10320	0.0426	0.6	0.306	0.6	0.0521	0.2	0.93	269	3	271	3	291	10	92	
21	32422	5675	140	0.02	1341	0.0275	2.4	0.199	2.4	0.0525	0.4	0.99	175	8	184	8	307	17	57	
22	11339	1496	57	0.03	6951	0.0434	2.6	0.31	2.6	0.0514	0.5	0.98	274	14	272	12	259	25	106	
23	14557	1738	74	0.02	324361	0.0482	0.7	0.344	0.7	0.0518	0.3	0.94	304	4	301	4	276	12	110	
24	33009	4494	160	0.02	4157	0.0400	1.4	0.29	1.4	0.0518	0.2	0.99	253	7	255	6	279	10	91	
25	28109	4082	133	0.05	2740	0.0364	1.9	0.261	1.9	0.0520	0.4	0.98	230	9	235	8	287	16	80	
26	21965	2633	112	0.10	7416	0.0462	1.3	0.33	1.3	0.0517	0.2	0.98	291	7	289	7	272	11	107	
27	23410	2812	122	0.10	48291	0.0472	0.7	0.34	0.7	0.0519	0.3	0.94	297	4	295	4	281	12	106	
28	23829	3336	116	0.11	3417	0.0377	1.4	0.27	1.4	0.0516	0.3	0.98	239	6	242	6	270	14	88	
29	24288	2994	120	0.05	3796	0.0437	1.2	0.312	1.3	0.0518	0.2	0.98	276	7	276	6	278	11	99	
40	8055	388	17	0.24	48970	0.0464	0.5	0.33	0.6	0.0523	0.4	0.77	293	3	293	3	297	19	99	
41	6231	299	13	0.23	37658	0.0463	0.5	0.34	0.6	0.0525	0.3	0.81	292	3	294	3	308	15	95	
42	4929	238	10	0.23	29993	0.0464	0.5	0.33	0.6	0.0519	0.4	0.72	292	3	291	3	279	20	105	
43	3372	158	7	0.34	20138	0.0467	0.5	0.338	0.6	0.0525	0.4	0.76	294	3	296	3	309	18	95	
44	4672	197	9	0.40	551	0.0454	0.5	0.21	1.5	0.0332	1.4	0.36	286	3	191	5	-860	77	-33	
45	4586	223	10	0.19	28179	0.0467	0.6	0.332	0.7	0.0515	0.4	0.85	294	3	291	3	265	16	111	
46	4811	113	9	0.23	26151	0.0842	0.9	0.68	1.0	0.0582	0.4	0.91	521	9	524	8	539	18	97	
47	5429	255	12	0.29	2604	0.0463	0.8	0.31	0.9	0.0482	0.4	0.88	292	5	272	4	107	20	271	
48	2775	129	6	0.27	4373	0.0479	0.8	0.328	0.9	0.0497	0.4	0.89	302	5	288	4	181	19	167	
49	4188	192	9	0.44	2479	0.0462	0.6	0.31	0.8	0.0490	0.4	0.81	291	4	276	4	146	21	199	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U^* (ppm)	Pb^* (ppm)	Th^\dagger U	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\ddagger}{^{238}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^\ddagger}{^{235}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^\ddagger}{^{206}\text{Pb}}$ %	2σ	$\rho_{\text{ho}}^{\#}$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ (Ma)	2σ	conc %	
6910C1																				
g30	8785	267	12	0.27	4544	0.0477	1.0	0.33	1.5	0.0497	1.0	0.70	301	6	287	7	179	48	168	
g31	6567	191	9	0.15	2798	0.0478	1.0	0.329	1.5	0.0499	1.1	0.67	301	6	289	8	190	52	159	
g32	38791	1063	48	0.19	2393	0.0485	1.1	0.344	1.7	0.0515	1.3	0.64	305	6	300	9	264	58	115	
g33	8074	185	10	0.43	775	0.0488	1.0	0.33	1.8	0.0491	1.5	0.57	307	6	290	9	153	68	201	
g34	12789	388	18	0.34	6526	0.0479	1.0	0.34	1.5	0.0512	1.0	0.72	301	6	295	7	248	46	122	
g35	286427	369	149	0.37	75496	0.3761	1.1	8.225	1.5	0.1586	1.0	0.72	2058	37	2256	26	2441	34	84	
g36	6723	203	10	0.33	6247	0.0482	1.0	0.34	1.5	0.0505	1.0	0.71	303	6	294	7	219	47	138	
g37	5820	177	8	0.32	3810	0.0486	1.0	0.322	1.5	0.0481	1.0	0.71	306	6	284	7	104	49	294	
g38	5837	181	8	0.25	5196	0.0479	1.1	0.324	1.5	0.0491	1.0	0.72	301	6	285	7	154	47	195	
g39	28235	867	38	0.11	25753	0.0482	1.0	0.343	1.5	0.0516	1.0	0.72	303	6	299	7	267	45	114	
g40	4983	154	7	0.32	4690	0.0475	1.0	0.321	1.5	0.0490	1.0	0.71	299	6	283	7	148	48	202	
g40b	21296	276	24	0.02	365277	0.0983	1.1	0.816	1.5	0.06021	1.0	0.74	604	13	606	14	611	43	99	
g41	21417	279	24	0.02	41196	0.0981	1.1	0.813	1.5	0.0601	1.0	0.73	604	12	604	13	606	43	100	
g42	19558	498	23	0.06	2271	0.0506	1.1	0.36	1.7	0.0519	1.3	0.63	318	7	314	9	282	60	113	
g43	5572	176	8	0.25	110171	0.0474	1.0	0.34	1.5	0.0521	1.0	0.70	298	6	297	7	291	46	102	
g44	10271	287	13	0.24	4540	0.0481	1.1	0.356	1.8	0.05367	1.4	0.60	303	6	309	9	357	63	85	
g45	28595	754	36	0.30	2117	0.0486	1.0	0.358	1.6	0.05334	1.2	0.66	306	6	311	8	343	52	89	
g46	4798	81	7	0.57	81638	0.0757	1.1	0.632	1.5	0.06054	1.1	0.69	470	10	497	12	623	46	75	
g47	9005	281	13	0.24	177496	0.0472	1.0	0.340	1.4	0.0523	1.0	0.71	297	6	297	7	298	46	100	
g48	20955	204	23	0.24	9661	0.1168	1.1	1.072	1.5	0.06655	1.0	0.74	712	15	740	16	824	42	86	
g49	3098	98	5	0.60	61856	0.0472	1.0	0.335	1.5	0.0515	1.1	0.69	298	6	294	8	263	48	113	
g50	2693	28	2	0.19	189	0.0452	1.0	0.479	1.5	0.07688	1.1	0.69	285	6	397	10	1118	43	25	
g51	4308	138	7	0.33	84999	0.0479	1.0	0.35	1.5	0.0524	1.0	0.70	302	6	302	8	303	47	100	
g52	5894	185	9	0.55	115715	0.0487	1.0	0.35	1.5	0.0528	1.0	0.71	306	6	308	8	321	46	96	
g53	14103	178	19	0.58	3023	0.0959	1.6	0.822	1.9	0.06220	1.1	0.83	590	18	609	17	681	44	87	
g54	9732	314	15	0.33	193070	0.0479	1.1	0.348	1.5	0.0526	1.0	0.72	302	6	303	8	313	46	96	
k4	21665	626	30	0.35	6021	0.0481	0.7	0.351	0.9	0.0529	0.5	0.79	303	4	305	5	327	25	93	
k5	14611	417	20	0.33	7677	0.0486	0.7	0.36	1.0	0.0536	0.7	0.66	306	4	312	5	356	33	86	
k6	17106	515	24	0.21	23908	0.0484	0.6	0.350	0.7	0.0524	0.5	0.78	305	3	305	4	304	21	100	
k7	27697	841	39	0.23	0	0.0492	0.9	0.36	1.0	0.0528	0.4	0.90	309	5	311	5	321	20	96	
k8	11189	338	16	0.24	0	0.0486	0.6	0.354	0.8	0.0528	0.4	0.82	306	4	307	4	319	20	96	
k9	8117	231	11	0.21	4584	0.0479	0.5	0.35	0.8	0.0533	0.6	0.69	302	3	306	4	341	26	89	
k10	14493	438	20	0.21	5150874	0.0492	0.7	0.36	0.8	0.0524	0.4	0.85	310	4	309	5	303	20	102	
k11	16860	515	24	0.31	5772907	0.0486	0.7	0.35	0.8	0.0525	0.4	0.84	306	4	306	4	305	20	100	
k12	13822	423	19	0.25	-1149077	0.0482	0.6	0.349	0.8	0.0525	0.5	0.80	304	4	304	4	306	21	99	
k13	10430	317	15	0.33	1758686	0.0480	0.6	0.35	0.8	0.0529	0.5	0.76	302	3	305	4	324	23	93	
k14	9185	283	13	0.34	5229691	0.0480	0.6	0.346	0.7	0.0523	0.5	0.78	303	3	302	4	298	21	102	
k15	10866	337	16	0.36	2348440	0.0480	0.6	0.35	0.7	0.0522	0.5	0.77	302	3	301	4	295	21	103	
k16	14745	386	20	0.30	0	0.0526	0.9	0.41	1.0	0.0560	0.6	0.83	330	6	346	6	451	25	73	
k17	14666	447	21	0.34	0	0.0473	0.7	0.350	0.8	0.0536	0.5	0.80	298	4	305	4	356	22	84	
k18	21129	629	29	0.30	0	0.0474	0.6	0.36	0.8	0.0548	0.5	0.78	298	4	311	4	406	22	74	
k19	12026	364	17	0.26	0	0.0486	0.6	0.352	0.8	0.0525	0.5	0.80	306	4	306	4	307	21	100	
k20	12277	183	13	0.17	6329489	0.0762	1.6	0.72	1.6	0.0681	0.5	0.94	473	14	548	14	871	22	54	
k21	29627	908	41	0.24	#####	0.0480	0.6	0.35	0.7	0.0526	0.4	0.79	302	3	303	4	313	20	96	
k22	12959	401	19	0.34	-2026249	0.0478	0.6	0.347	0.8	0.0527	0.5	0.78	301	4	302	4	314	22	96	
k23	17476	434	21	0.29	-356801	0.0485	0.6	0.43	0.9	0.0650	0.7	0.67	305	3	366	5	774	27	39	
k24	16586	502	23	0.27	534873	0.0466	0.6	0.351	0.7	0.0547	0.5	0.77	293	3	305	4	398	20	74	
k25	9633	281	13	0.26	266609	0.0479	0.6	0.36	0.9	0.0551	0.7	0.66	302	3	315	5	414	29	73	
k26	12921	370	18	0.35	-4986803	0.0486	0.6	0.38	0.8	0.0560	0.5	0.80	306	4	323	4	451	20	68	
k27	18480	555	26	0.30	-1552648	0.0488	0.6	0.355	0.7	0.0529	0.4	0.81	307	4	309	4	322	20	95	
k28	15235	459	22	0.36	1176518	0.0486	0.6	0.35	0.7	0.0530	0.5	0.78	306	3	308	4	327	20	93	
k29	10263	315	14	0.22	-325444	0.0483	0.6	0.348	0.8	0.0523	0.5	0.80	304	4	303	4	297	21	102	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U^* (ppm)	Pb^* (ppm)	Th^\dagger U	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$	2σ %	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	2σ %	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$	2σ %	$\rho_{\text{ho}}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2σ (Ma)	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2σ (Ma)	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2σ (Ma)	conc %
6814H1																			
a1	93851	####	364	0.03	1438	0.0175	7.3	4.7x108	7.4	0.0496	0.9	0.99	112	8	115	8	177	22	63
a2	164587	9608	301	0.06	136	0.0267	6.1	0.186	6.6	0.0507	2.4	0.93	170	10	174	11	226	56	75
a3	1540441	####	1735	0.01	9	0.0155	3.3	3.434	29.5	1.6086	29.4	0.11	99	3	1512	264	5897	403	2
a4	1039644	####	845	0.01	29	0.0040	8.3	0.64	15.7	1.1772	13.4	0.53	26	2	505	65	5466	186	0
a5	750803	####	591	0.01	40	0.0045	14.0	0.31	35.8	0.4930	33.0	0.39	29	4	272	89	4220	487	1
a6	1532908	####	853	0.01	6	0.0043	8.7	1.043	24.0	1.7514	22.3	0.36	28	2	725	133	6014	305	0
a7	1421910	####	929	0.01	24	0.0029	3.5	0.55	5.3	1.3610	4.0	0.65	19	1	442	19	5667	55	0
a8	133492	7943	436	0.04	275	0.0510	5.6	0.681	5.8	0.0968	1.5	0.97	321	18	527	24	1563	28	21
a9	100781	7585	207	0.05	179	0.0224	4.7	0.150	7.6	0.0485	5.9	0.62	143	7	142	10	124	139	115
a10	62318	####	244	0.02	277	0.0156	3.9	0.109	6.8	0.0503	5.5	0.58	100	4	105	7	209	128	48
a11	130640	####	453	0.02	568	0.0344	4.2	0.361	4.4	0.07615	1.3	0.95	218	9	313	12	1099	27	20
a12	52245	9509	99	0.03	462	0.0093	19.8	0.069	20.1	0.0536	3.7	0.98	59	12	67	13	354	83	17
a13	111593	####	441	0.02	1298	0.0372	5.1	0.27	5.5	0.0519	2.1	0.93	235	12	240	12	281	48	84
a14	20181	4553	78	0.18	494	0.0160	3.9	0.19	6.6	0.0851	5.3	0.59	102	4	174	11	1318	103	8
a15	34709	4238	155	0.07	756	0.0383	3.5	0.277	4.1	0.05245	2.0	0.87	242	8	248	9	305	46	79
a16	81794	####	367	0.02	426	0.0236	4.2	0.169	5.0	0.05196	2.6	0.85	151	6	159	7	284	60	53
a17	69646	####	192	0.02	168	0.0175	3.8	0.130	6.7	0.05391	5.6	0.56	112	4	124	8	367	126	30
a18	127397	####	544	0.02	1101	0.0499	4.6	0.346	4.8	0.0503	1.5	0.95	314	14	302	13	210	34	149
a19	160015	####	601	0.02	867	0.0390	4.2	0.358	4.5	0.06660	1.6	0.93	247	10	311	12	825	33	30
a20	86960	3945	246	0.12	646	0.0580	3.5	0.589	3.6	0.0737	0.8	0.97	363	12	470	14	1033	16	35
a21	54352	####	61	0.02	50	0.0017	4.3	0.080	6.5	0.34203	4.9	0.66	11	0	78	5	3672	74	0
a22	41792	8327	73	0.05	110	0.0061	4.2	0.16	4.6	0.1886	1.9	0.91	39	2	150	7	2730	32	1
a23	70875	5346	336	0.09	1877	0.0637	5.6	0.45	5.8	0.0511	1.6	0.96	398	22	376	18	246	36	162
a24	92718	####	281	0.02	1847	0.0199	8.6	0.143	8.7	0.05195	1.6	0.98	127	11	135	11	283	38	45
a25	69252	9770	227	0.04	679	0.0235	4.7	0.172	4.9	0.0532	1.4	0.96	150	7	161	7	335	31	45
a26	108221	####	460	0.02	1275	0.0368	3.4	0.271	5.1	0.0533	3.8	0.67	233	8	243	11	340	86	69
a27	20472	3027	53	0.15	415	0.0167	6.6	0.12	7.6	0.0517	3.7	0.87	107	7	114	8	273	85	39
a28	25589	1983	57	0.05	162	0.0240	4.2	0.433	4.6	0.1307	1.7	0.93	153	6	365	14	2108	30	7
a30	121269	####	485	0.02	476	0.0344	3.7	0.24	4.5	0.0514	2.5	0.82	218	8	222	9	260	58	84
a31	46211	####	173	0.02	821	0.0094	5.6	0.087	5.9	0.0670	1.6	0.96	60	3	85	5	838	34	7
a32	79606	7630	515	0.07	1135	0.0685	5.8	0.60	5.9	0.0631	1.3	0.98	427	24	475	23	712	27	60
a33	123837	####	372	0.02	298	0.0210	7.4	0.15	7.7	0.0522	2.4	0.95	134	10	143	10	293	56	46
a34	93990	####	142	0.02	808	0.0074	9.1	0.052	9.3	0.0512	1.9	0.98	48	4	52	5	249	43	19
a35	64331	7456	172	0.12	368	0.0209	23.4	0.15	23.7	0.0507	3.9	0.99	133	31	138	31	228	90	58
a36	28951	2329	71	0.19	95	0.0228	5.3	0.629	8.8	0.2004	6.9	0.61	145	8	495	35	2829	113	5
a37	21212	2214	32	0.20	191	0.0117	6.3	0.10	8.6	0.0596	6.0	0.72	75	5	93	8	590	129	13
a38	78875	861	84	0.21	39	0.0390	5.1	2.29	6.3	0.4254	3.8	0.80	246	12	1208	46	4001	56	6
a39	39467	9891	114	0.03	187	0.0109	5.8	0.078	6.9	0.0517	3.7	0.84	70	4	76	5	271	85	26
a40	150112	####	388	0.02	582	0.0251	5.7	0.26	5.8	0.0742	0.8	0.99	160	9	232	12	1048	15	15
a41	55753	####	228	0.02	428	0.0178	6.1	0.131	6.6	0.0535	2.5	0.92	114	7	125	8	350	56	32
a42	65036	9535	71	0.02	79	0.0051	6.2	0.03	16.0	0.0480	14.7	0.39	33	2	34	5	97	349	34
a43	67333	6091	183	0.05	453	0.0302	8.0	0.23	8.2	0.0547	1.8	0.98	192	15	208	16	400	39	48
a44	92374	4471	222	0.07	505	0.0463	3.8	0.320	4.3	0.0501	2.0	0.89	292	11	282	11	201	45	145
a45	114124	6176	253	0.03	509	0.0387	5.1	0.27	5.4	0.0500	1.7	0.95	245	12	240	12	197	38	124
a46	198025	9111	245	0.03	238	0.0218	9.5	0.340	9.6	0.1130	0.9	1.00	139	13	297	25	1848	16	8
a47	85890	3530	165	0.08	663	0.0472	3.4	0.33	3.6	0.0514	1.3	0.93	297	10	293	9	260	30	114
a48	38793	2887	65	0.13	892	0.0229	4.6	0.16	4.9	0.0497	1.4	0.96	146	7	148	7	180	33	81
a49	62951	6848	49	0.03	60	0.0039	3.8	0.159	4.0	0.2914	1.2	0.96	25	1	149	6	3425	18	1
a50	88873	5126	71	0.07	134	0.0104	23.3	0.07	23.7	0.0485	4.4	0.98	67	16	68	16	124	103	54
a51	150291	6961	252	0.02	1136	0.0370	8.8	0.325	9.6	0.0639	3.8	0.92	234	20	286	24	737	81	32
a52	162339	6371	214	0.03	283	0.0313	12.8	0.22	13.0	0.0520	2.5	0.98	199	25	206	25	286	56	70
a53	82438	4364	88	0.04	1323	0.0196	7.7	0.14	7.9	0.0515	1.6	0.98	125	10	132	10	261	36	48
a54	97102	1916	179	0.12	1382	0.0953	3.4	0.824	3.7	0.0627	1.6	0.91	587	19	610	17	697	33	84
a55	217231	6819	206	0.02	212	0.0270	7.7	0.19	8.2	0.0504	2.8	0.94	172	13	175	13	216	64	80
a56	14355	710	23	0.07	418	0.0316	3.6	0.360	5.7	0.0825	4.4	0.63	201	7	312	15	1258	86	16
a57	81066	4259	111	0.04	1472	0.0269	4.5	0.195	4.7	0.0526	1.3	0.96	171	8	181	8	311	30	55
a58	56102	2111	130	0.12	239	0.0570	7.9	0.457	8.3	0.0582	2.6	0.95	357	27	382	27	537	56	67
a59	135999	5989	202	0.02	1406	0.0325	3.9	0.266	4.0	0.0593	0.9	0.97	206	8	240	8	578	19	3

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	^{206}Pb	$^{206}\text{Pb}^\ddagger$	2 σ	$^{207}\text{Pb}^\ddagger$	2 σ	$^{207}\text{Pb}^\ddagger$	2 σ	$\text{rho}^\#$	^{206}Pb	2 σ	^{207}Pb	2 σ	^{207}Pb	2 σ	conc
	(cps)	(ppm)	(ppm)	U	^{204}Pb	^{238}U	%	^{235}U	%	^{206}Pb	%	^{238}U	(Ma)	^{235}U	(Ma)	^{206}Pb	(Ma)	%	
6814G1																			
a1	1141	116	5	0.55	2225	0.0415	1.3	0.30	6.2	0.0519	6.1	0.21	262	3	264	15	283	139	93
a2	8924	763	28	0.33	638	0.0353	0.7	0.26	3.8	0.0542	3.8	0.19	224	2	238	8	379	84	59
a3	640	55	3	0.54	1135	0.0467	3.9	0.37	8.4	0.0572	7.4	0.46	294	11	318	23	499	163	59
a4	1362	134	6	0.68	2619	0.0449	1.8	0.32	6.2	0.0524	6.0	0.28	283	5	285	16	302	136	94
a5	2324	236	10	0.68	4342	0.0391	3.5	0.29	6.7	0.0539	5.6	0.53	247	9	259	15	367	127	68
a6	7154	725	29	0.29	3242	0.0404	1.2	0.29	3.7	0.0525	3.4	0.33	255	3	261	8	308	79	83
a7	891	86	4	0.43	1715	0.0450	1.8	0.32	6.4	0.0520	6.1	0.28	284	5	284	16	284	140	100
a8	524	51	2	0.51	1006	0.0456	1.6	0.33	7.1	0.0521	6.9	0.22	288	4	288	18	290	159	99
a9	797	88	4	0.48	1540	0.0419	6.3	0.30	11.5	0.0522	9.6	0.55	265	16	268	27	295	219	90
a10	1357	86	3	0.55	284	0.0211	49.2	0.22	52.3	0.0741	17.8	0.94	134	66	198	99	1043	359	13
a11	5948	563	31	1.07	7298	0.0459	0.8	0.33	2.0	0.0520	1.8	0.40	289	2	289	5	284	42	102
b1	2047	168	8	0.47	3197	0.0456	2.4	0.331	7.8	0.0527	7.4	0.31	288	7	291	20	314	168	92
b2	2297	208	10	0.60	4405	0.0445	2.1	0.32	3.8	0.0519	3.2	0.55	281	6	281	9	281	74	100
b3	2446	235	11	0.41	4701	0.0447	2.3	0.32	4.5	0.0520	3.8	0.53	282	6	282	11	284	87	99
b4	2547	98	5	0.58	242	0.0339	6.2	0.681	20.6	0.14577	19.7	0.30	215	13	527	89	2297	338	9
b5	1173	111	5	0.44	2275	0.0437	2.9	0.310	4.9	0.05139	4.0	0.58	276	8	274	12	258	93	107
b6	962	94	4	0.51	1862	0.0445	2.6	0.318	7.1	0.05184	6.6	0.37	281	7	280	18	278	152	101
b7	1428	138	6	0.59	2728	0.0434	2.7	0.312	6.0	0.0520	5.4	0.44	274	7	275	15	287	123	96
b8	5041	486	21	0.39	9605	0.0421	2.2	0.303	3.2	0.05223	2.3	0.69	266	6	269	8	295	53	90
b9	3099	332	12	0.38	5642	0.0367	3.2	0.277	6.0	0.0548	5.1	0.53	232	7	249	13	406	113	57
b10	790	80	4	0.47	1504	0.0467	2.7	0.336	7.6	0.05217	7.1	0.36	294	8	294	20	293	161	100
b11	8384	667	27	0.72	458	0.0361	2.5	0.27	4.1	0.0545	3.2	0.62	229	6	244	9	392	72	58
b12	25855	1865	70	0.06	344	0.0365	4.7	0.27	6.6	0.0530	4.6	0.72	231	11	240	14	329	105	70
b13	2617	255	12	0.63	4999	0.0454	2.6	0.326	5.1	0.05205	4.4	0.51	286	7	287	13	288	100	100
b14	9217	1923	30	0.18	780	0.0152	2.6	0.146	3.1	0.0695	1.7	0.84	97	2	138	4	914	35	11
b15	2831	301	13	0.23	5439	0.0454	2.4	0.325	3.9	0.0519	3.1	0.60	286	7	286	10	282	72	101
b16	10263	1974	39	0.11	536	0.0158	2.8	0.17	3.6	0.0795	2.3	0.78	101	3	162	5	1184	45	9
b17	12322	1510	49	0.15	884	0.0331	2.2	0.293	4.9	0.0641	4.4	0.45	210	5	261	11	743	92	28
b18	3193	399	18	0.35	6181	0.0448	2.3	0.32	4.5	0.0518	3.9	0.50	282	6	282	11	278	89	101
b19	11537	2418	34	0.25	691	0.0133	2.3	0.14	3.1	0.0740	2.1	0.74	85	2	129	4	1040	42	8
b20	1079	114	5	0.48	2070	0.0453	2.2	0.325	5.3	0.0520	4.7	0.43	286	6	286	13	286	109	100
b21	5938	669	30	0.35	11383	0.0445	2.1	0.32	3.3	0.0520	2.5	0.64	281	6	281	8	284	58	99
b22	1070	100	5	0.68	1773	0.0464	2.7	0.39	8.6	0.0603	8.1	0.32	292	8	331	24	613	176	48
b23	2014	219	10	0.62	3840	0.0447	2.6	0.322	4.3	0.05227	3.5	0.59	282	7	283	11	297	79	95
b24	4576	524	23	0.31	8702	0.0448	2.7	0.32	3.7	0.0524	2.5	0.74	282	8	285	9	304	56	93
b25	4678	447	16	0.24	1332	0.0356	2.5	0.319	3.7	0.0649	2.8	0.66	226	5	281	9	770	59	29
b26	324	34	2	0.47	591	0.0442	3.9	0.33	8.6	0.0547	7.7	0.45	279	11	292	22	400	172	70
b27	3073	353	15	0.27	5929	0.0433	2.6	0.308	3.8	0.0516	2.8	0.67	273	7	272	9	267	65	102
b28	705	77	4	0.74	1355	0.0434	3.1	0.31	7.7	0.0520	7.0	0.41	274	8	275	19	283	161	97
b29	354	38	2	0.47	615	0.0460	4.1	0.329	11.3	0.0519	10.5	0.36	290	12	289	29	281	241	103
b30	2618	253	12	0.27	4289	0.0457	3.1	0.38	5.8	0.0606	4.8	0.54	288	9	328	16	625	105	46
b31	534	62	3	0.65	1089	0.0451	2.9	0.304	7.3	0.0488	6.7	0.40	284	8	269	17	138	157	205
b32	1504	47	6	0.22	2254	0.1362	2.8	1.25	4.8	0.0664	3.8	0.60	823	22	822	27	818	80	101
b33	2737	553	11	0.12	459	0.0201	2.5	0.225	7.0	0.0810	6.5	0.35	128	3	206	13	1220	128	11
b34	1384	161	7	0.23	2754	0.0449	2.9	0.307	5.2	0.04955	4.3	0.56	283	8	272	12	174	101	163
b35	1568	167	8	0.54	2834	0.0451	2.2	0.342	5.3	0.05501	4.8	0.41	284	6	299	14	413	107	69
b36	4178	1119	17	0.12	1218	0.0153	2.7	0.13	4.8	0.0625	4.0	0.56	98	3	125	6	692	85	14
b37	1927	52	6	0.69	100	0.0956	2.4	1.967	19.4	0.14920	19.3	0.12	589	14	1104	140	2337	330	25
b38	1792	197	9	0.34	3440	0.0447	2.6	0.32	5.5	0.0519	4.8	0.47	282	7	282	14	281	110	100
b39	484	45	2	0.45	897	0.0424	2.8	0.32	8.4	0.0539	7.9	0.34	268	7	278	21	368	177	73
b40	1587	146	6	0.26	3043	0.0453	2.4	0.33	5.3	0.0522	4.7	0.46	285	7	287	13	296	108	97
b41	404	30	1	0.43	617	0.0442	3.6	0.397	9.3	0.06513	8.6	0.39	279	10	339	27	779	180	36
b42	4627	371	15	0.36	378	0.0389	2.5	0.51	9.4	0.0951	9.0	0.27	246	6	419	33	1530	170	16
b43	377	31	1	0.54	726	0.0456	2.9	0.329	9.0	0.0522	8.5	0.32	288	8	288	23	295	195	97
b44	1683	134	6	0.24	2918	0.0445	2.7	0.353	6.8	0.05740	6.3	0.39	281	7	307	18	507	138	55
b45	1852	121	7	0.32	1920	0.0571	2.6	0.457	5.9	0.0580	5.3	0.43	358	9	382	19	531	117	67
b46	1789	132	6	0.65	3525	0.0418	2.9	0.29	5.6	0.0506	4.8	0.51	264	7	260	13	223	111	118
b47	1094	62	4	0.41	2086	0.0582	3.9	0.406	7.1	0.0507	5.9	0.55	364	14	346	21	225</		

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U (ppm)	Pb (ppm)	Th^\dagger U	^{206}Pb ^{204}Pb	$^{206}\text{Pb}^S_{^{238}\text{U}}$ %	2σ %	$^{207}\text{Pb}^S_{^{235}\text{U}}$ %	2σ %	$^{207}\text{Pb}^S_{^{206}\text{Pb}}$ %	2σ %	$\rho\omega^{\#}$	^{206}Pb ^{238}U (Ma)	2σ (Ma)	^{207}Pb ^{235}U (Ma)	2σ (Ma)	^{207}Pb ^{206}Pb (Ma)	2σ (Ma)	conc %
6814F1																			
1	8602	330	15	0.297	9204	0.0465	1.1	0.33	1.5	0.0514	1.0	0.72	293	6	289	7	260	46	113
2	5409	195	9	0.255	2481	0.0466	1.1	0.324	1.8	0.0504	1.4	0.59	294	6	285	9	214	65	137
3	13233	499	24	0.485	15038	0.0484	1.2	0.343	1.6	0.0515	1.0	0.76	305	7	300	8	262	46	116
4	20392	717	35	0.307	4661	0.0495	1.0	0.35	1.5	0.0511	1.0	0.71	312	6	304	8	247	46	126
5	8903	345	16	0.308	74714	0.0468	1.0	0.34	1.5	0.0521	1.0	0.72	295	6	294	7	290	46	102
6	17511	711	31	0.320	5911	0.0431	1.1	0.305	1.5	0.0514	1.0	0.72	272	6	270	7	257	46	106
7	69830	2609	84	0.202	471	0.0302	1.6	0.20	2.0	0.0485	1.2	0.80	192	6	187	7	124	55	154
8	42296	1564	72	0.178	9393	0.0489	1.1	0.343	1.5	0.0509	1.0	0.74	307	7	299	8	236	46	131
9	68227	2235	102	0.167	1405	0.0466	1.2	0.327	1.6	0.0510	1.0	0.76	294	7	288	8	239	46	123
10	76194	6362	79	0.133	263	0.0105	1.3	0.065	2.0	0.0451	1.6	0.64	67	2	64	3	-50	74	-135
11	24577	916	42	0.251	7683	0.0471	1.0	0.336	1.5	0.05175	1.0	0.71	297	6	294	7	274	46	108
12	62425	2126	100	0.128	4885	0.0504	1.0	0.362	1.5	0.0521	1.0	0.72	317	6	314	8	289	46	110
13	88555	3383	128	0.108	1458	0.0397	1.2	0.283	1.5	0.05167	1.0	0.75	251	6	253	7	271	46	93
14	12714	505	21	0.271	2802	0.0425	1.2	0.295	1.5	0.0503	1.0	0.75	268	6	263	7	210	46	128
15	12734	504	21	0.269	2733	0.0425	1.1	0.295	1.5	0.05027	1.0	0.75	269	6	262	7	207	46	129
16	27690	1130	45	0.320	1754	0.0394	2.3	0.28	2.5	0.0509	1.1	0.90	249	11	248	11	234	50	106
17	81298	3134	66	0.099	165	0.0163	2.2	0.10	2.7	0.0456	1.6	0.82	104	5	99	5	-24	74	-436
18	#####	3563	74	0.088	136	0.0150	2.4	0.102	2.7	0.0491	1.3	0.88	96	5	98	5	154	60	62
19	8397	325	15	0.276	166617	0.0470	1.0	0.34	1.4	0.0520	1.0	0.71	296	6	295	7	285	46	104
20	18569	718	29	0.333	1756	0.0397	1.6	0.29	2.0	0.0528	1.1	0.83	251	8	258	9	320	49	78
21	77593	2639	107	0.186	962	0.0406	1.1	0.289	1.6	0.0515	1.1	0.71	257	6	258	7	264	50	97
22	75565	4220	62	0.117	165	0.0116	1.5	0.07	1.8	0.0459	1.1	0.79	75	2	72	3	-6	54	-1269
23	14832	574	26	0.288	56628	0.0470	1.1	0.337	1.5	0.0520	1.0	0.73	296	6	295	7	284	45	104
24	59028	2061	64	0.050	403	0.0299	2.4	0.209	3.1	0.0506	2.0	0.77	190	9	193	11	224	90	85
26	97881	4761	66	0.097	109	0.0097	1.5	0.059	1.9	0.0438	1.2	0.77	62	2	58	2	-123	60	-51
27	79098	4455	65	0.119	155	0.0110	1.2	0.07	1.7	0.0448	1.2	0.70	71	2	67	2	-68	59	-103
30	9642	378	17	0.272	16456	0.0469	1.0	0.33	1.5	0.0509	1.0	0.72	295	6	289	7	236	46	125
31	5031	192	9	0.246	4803	0.0473	1.1	0.320	1.6	0.04900	1.2	0.68	298	6	282	8	148	55	202
32	7951	283	14	0.188	3835	0.0502	1.0	0.334	1.8	0.04829	1.5	0.58	316	6	293	9	114	67	278
33	5682	207	10	0.323	5572	0.0510	1.1	0.338	1.5	0.04800	1.0	0.73	321	7	295	8	99	48	323
34	7319	262	13	0.346	4598	0.0500	1.1	0.345	1.5	0.0500	1.1	0.69	314	6	301	8	196	50	160
35	16688	581	28	0.366	4019	0.0502	1.1	0.341	1.5	0.04934	1.1	0.72	316	7	298	8	164	49	193
36	9608	348	17	0.278	6816	0.0499	1.1	0.34	1.5	0.0497	1.0	0.72	314	7	299	8	180	47	174
37	11309	413	20	0.452	4851	0.0488	1.1	0.337	1.6	0.0500	1.1	0.72	307	7	295	8	196	50	157
38	6307	225	10	0.260	4354	0.0475	1.1	0.34	1.6	0.0522	1.1	0.71	299	7	298	8	292	50	102
39	5767	206	10	0.441	3208	0.0480	1.1	0.334	1.5	0.0504	1.0	0.72	302	6	293	7	215	47	141
40	11106	412	20	0.334	51757	0.0489	1.1	0.351	1.5	0.0520	1.0	0.72	308	6	305	8	287	46	107
40b	5858	197	10	0.416	3956	0.0488	1.0	0.362	1.5	0.0538	1.1	0.69	307	6	314	8	361	47	85
41	14139	541	27	0.639	278356	0.0472	1.1	0.341	1.5	0.05244	1.0	0.73	297	6	298	8	305	45	98
42	9865	386	19	0.643	194946	0.0463	1.1	0.334	1.5	0.0523	1.0	0.73	292	6	293	7	297	46	98
43	9115	329	15	0.227	59591	0.0487	1.0	0.36	1.5	0.0535	1.0	0.72	307	6	312	8	351	45	87
44	8791	320	15	0.380	15506	0.0487	1.0	0.35	1.5	0.0524	1.0	0.71	307	6	306	8	301	46	102
45	9300	335	16	0.236	180535	0.0493	1.0	0.359	1.5	0.05271	1.1	0.70	311	6	311	8	316	48	98
46	4931	191	9	0.340	97230	0.0465	1.1	0.337	1.5	0.05258	1.0	0.73	293	6	295	8	311	46	94
47	8036	303	14	0.287	157506	0.0477	1.0	0.346	1.5	0.0525	1.0	0.72	300	6	301	8	309	46	97
48	23290	937	37	0.151	3741	0.0418	1.5	0.30	1.9	0.0521	1.1	0.82	264	8	267	9	291	49	91
49	8586	333	15	0.409	167777	0.0460	1.1	0.33	1.5	0.0527	1.0	0.73	290	6	293	8	317	46	92
50	4098	158	7	0.260	9837	0.0459	1.1	0.330	1.5	0.0521	1.1	0.71	290	6	290	8	289	48	100
51	11346	439	20	0.361	64692	0.0458	1.1	0.34	1.5	0.0531	1.0	0.73	289	6	294	8	331	45	87
52	8128	304	14	0.346	156998	0.0473	1.0	0.348	1.5	0.0533	1.0	0.72	298	6	303	8	344	45	87
53	4846	188	9	0.522	93938	0.0455	1.0	0.334	1.5	0.0532	1.1	0.70	287	6	293	8	337	47	85
54	14957	575	26	0.294	289984	0.0463	1.0	0.339	1.5	0.05323	1.0	0.72	291	6	297	7	338	45	86
55	9920	385	17	0.246	193055	0.0459	1.1	0.335	1.5	0.0529	1.0	0.72	289	6	293	7	326	45	89
56	3889	146	7	0.379	75325	0.0470	1.1	0.35	1.5	0.0534	1.0	0.73	296	6	302	8	346	46	86
57	10118	387	17	0.279	38625	0.0466	1.0	0.34	1.4	0.0529	1.0	0.71	294	6	297	7	326	45	90
58	23560	634	30	0.290	558	0.0439	1.0	0.308	2.4	0.05089	2.2	0.43	277	6	273	12	236	98	117
59	11054	468	18	0.214	2988	0.0384	1.2	0.281	1.6	0.05307	1.0	0.77	243	6	251	7	332	47	73

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U^+ (ppm)	Pb^+ (ppm)	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$ %	2σ	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$ %	2σ	$\rho_{\text{ho}}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$ (Ma)	2σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ (Ma)	2σ	conc	
6814E1																				
1	30533	11	32	0.005	59608	0.0483	1.0	0.35	1.0	0.0525	0.2	0.99	304	6	304	5	306	7	99	
2	31905	11	35	0.012	44171	0.0501	1.0	0.362	1.0	0.0525	0.2	0.99	315	6	314	5	306	7	103	
3	9597	3	11	0.010	71318	0.0477	1.0	0.344	1.0	0.0522	0.3	0.97	301	6	300	5	295	12	102	
4	20638	7	23	0.012	153850	0.0507	1.0	0.37	1.0	0.0525	0.2	0.98	319	6	317	6	307	9	104	
5	8185	3	9	0.011	60711	0.0491	1.0	0.35	1.0	0.0523	0.2	0.98	309	6	308	5	297	8	104	
6	27582	10	31	0.012	204048	0.0469	1.0	0.340	1.0	0.0526	0.2	0.99	295	6	297	5	313	8	94	
7	11925	4	13	0.007	88580	0.0480	1.0	0.35	1.0	0.0522	0.2	0.98	302	6	301	5	293	8	103	
8	34176	12	39	0.016	251833	0.0481	1.0	0.350	1.0	0.0528	0.2	0.98	303	6	305	5	321	8	94	
9	19877	7	22	0.008	147236	0.0484	1.0	0.351	1.0	0.0525	0.2	0.98	305	6	305	5	307	9	99	
10	34135	12	37	0.007	250279	0.0483	1.0	0.354	1.0	0.0530	0.2	0.99	304	6	307	5	331	7	92	
11	39773	14	42	0.007	9396	0.0489	1.0	0.349	1.0	0.05170	0.2	0.99	308	6	304	5	272	8	113	
12	25518	9	27	0.006	10622	0.0494	1.0	0.350	1.0	0.0514	0.2	0.98	311	6	305	5	258	8	120	
13	23623	8	25	0.007	16567	0.0494	1.0	0.35	1.0	0.0520	0.2	0.99	311	6	308	5	285	8	109	
14	28828	10	32	0.009	212739	0.0500	1.0	0.36	1.0	0.0528	0.2	0.99	315	6	315	6	318	7	99	
15	19106	7	21	0.009	141523	0.0486	1.0	0.352	1.0	0.05253	0.2	0.99	306	6	306	5	309	8	99	
16	30987	11	34	0.010	228317	0.0487	1.0	0.355	1.0	0.05278	0.2	0.99	307	6	308	6	320	7	96	
17	6245	2	7	0.009	46417	0.0486	1.2	0.349	1.2	0.05214	0.2	0.98	306	7	304	6	291	11	105	
18	15194	5	17	0.015	112078	0.0493	1.0	0.358	1.0	0.0526	0.2	0.98	311	6	311	5	313	8	99	
19	34503	12	37	0.008	253807	0.0488	1.0	0.356	1.1	0.05288	0.2	0.99	307	6	309	6	324	8	95	
20	9670	3	10	0.007	71644	0.0488	1.0	0.352	1.0	0.0523	0.2	0.98	307	6	306	5	301	8	102	
21	17235	6	19	0.010	127154	0.0489	1.0	0.355	1.0	0.05268	0.2	0.98	308	6	309	5	315	8	98	
22	15895	6	17	0.008	117711	0.0490	1.0	0.35	1.0	0.0525	0.2	0.98	309	6	308	5	308	8	100	
23	21340	7	23	0.010	155793	0.0508	1.4	0.37	1.4	0.0532	0.3	0.98	319	9	322	8	339	13	94	
g1	14389	457	21	0.251	65142	0.0491	2.3	0.358	2.3	0.0529	0.5	0.98	309	14	311	12	325	21	95	
g3	16768	532	24	0.180	29792	0.0490	2.3	0.36	2.3	0.0528	0.5	0.98	308	14	310	12	322	21	96	
g4	5820	185	9	0.290	12783	0.0493	2.4	0.36	2.4	0.0531	0.5	0.98	310	14	313	13	332	22	94	
g5	46237	1471	66	0.153	23131	0.0491	2.3	0.358	2.3	0.0529	0.4	0.98	309	14	311	12	326	20	95	
g6	67808	2054	104	0.528	6041	0.0496	2.5	0.38	2.5	0.0550	0.5	0.98	312	15	324	14	411	24	76	
g7	6685	210	10	0.173	14116	0.0491	2.3	0.362	2.4	0.0535	0.5	0.97	309	14	313	13	348	24	89	
g8	22326	711	32	0.162	32920	0.0494	2.3	0.358	2.3	0.0526	0.5	0.98	311	14	311	12	310	20	100	
g12	27977	849	40	0.814	2572	0.0479	2.6	0.378	2.9	0.0572	1.3	0.89	302	15	326	16	500	58	60	
g13	789	11	1	0.082	230	0.1010	2.7	0.80	3.2	0.0576	1.8	0.83	620	32	598	29	514	77	121	
g14	27438	852	39	0.123	9792	0.0495	2.3	0.37	2.3	0.0536	0.5	0.98	311	14	317	12	356	20	87	
g15	12798	329	16	0.147	1313	0.0504	2.3	0.442	2.6	0.06358	1.3	0.86	317	14	371	16	728	56	44	
g16	7275	228	11	0.244	19445	0.0491	2.3	0.360	2.3	0.05315	0.5	0.98	309	14	312	12	335	21	92	
g17	6001	146	8	0.159	1649	0.0598	2.6	0.476	2.7	0.05766	0.6	0.97	375	19	395	18	517	26	72	
g18	9377	305	14	0.300	184161	0.0477	2.3	0.348	2.3	0.0530	0.5	0.98	300	13	304	12	330	22	91	
g19	42298	1298	62	0.195	71862	0.0513	2.3	0.375	2.3	0.05307	0.5	0.98	322	14	324	13	332	20	97	
g20	18453	612	27	0.154	35710	0.0478	2.3	0.34	2.3	0.0522	0.5	0.98	301	13	300	12	294	21	102	
g21	5317	173	8	0.272	105362	0.0481	2.3	0.349	2.3	0.0527	0.5	0.98	303	13	304	12	315	22	96	
g22	19911	636	29	0.248	12839	0.0487	2.3	0.35	2.3	0.0528	0.5	0.98	307	14	308	12	320	21	96	
g23	36198	1184	53	0.151	723992	0.0483	2.3	0.348	2.3	0.0523	0.5	0.98	304	13	303	12	298	21	102	
g24	25779	837	38	0.171	512952	0.0483	2.3	0.348	2.3	0.0522	0.5	0.98	304	13	303	12	295	20	103	
g25	37715	1239	54	0.148	751757	0.0479	2.3	0.346	2.3	0.0524	0.5	0.98	302	13	301	12	301	21	100	
g26	7305	236	11	0.188	144852	0.0485	2.3	0.349	2.3	0.0522	0.5	0.98	305	14	304	12	295	21	103	
g27	23269	761	34	0.207	465297	0.0484	2.3	0.349	2.3	0.0522	0.5	0.98	305	13	304	12	294	21	104	
g28	5564	183	8	0.280	111687	0.0483	2.3	0.35	2.3	0.0520	0.5	0.98	304	14	302	12	286	22	106	
g29	18230	600	27	0.240	365088	0.0480	2.3	0.34	2.3	0.0521	0.5	0.98	302	13	301	12	289	21	105	
g30	35039	1088	51	0.246	71384	0.0507	2.3	0.366	2.3	0.05231	0.4	0.98	319	14	316	12	299	20	107	
k1	32111	14	44	0.011	959	0.0483	0.9	0.248	1.0	0.03730	0.4	0.93	304	5	225	4	-535	19	-57	
k2	14841	6	19	0.002	400	0.0467	0.9	0.102	1.0	0.0158	0.4	0.92	294	5	98	2	-3843	45	-8	
k3	22603	10	31	0.008	874	0.0483	0.9	0.24	1.0	0.0354	0.4	0.92	304	5	215	4	-674	21	-45	
k4	32112	14	44	0.012	1216	0.0485	1.0	0.27	1.0	0.0409	0.4	0.93	305	6	246	5	-292	19	-104	
k5	53890	23	75	0.018	1471	0.0493	1.3	0.301	1.3	0.0443	0.4	0.96	310	8	267	6	-93	19	-332	
k6	47237	21	64	0.010	2238	0.0477	0.9	0.30	1.0	0.0464	0.4	0.93	300	5	270	5	17	18	1798	
k7	24967	11	35	0.011	1549	0.0480	0.9	0.283	1.0	0.0428	0.4	0.92	302	5	253	4	-180	18	-168	
k9	44532	20	61	0.011	3875	0.0479	0.9	0.325	1.0	0.0491	0.4	0.93	302	5	285	5	153	17	197	
k10	30079	13	40	0.008	3225	0.0479	0.9	0.318	1.0	0.04814	0.4	0.93	3							

k28b	15674	7	22	0.011	116974	0.0484	0.9	0.351	1.0	0.0526	0.4	0.92	305	5	305	5	310	18	98
k29	20011	8	27	0.008	147782	0.0551	1.0	0.401	1.1	0.0528	0.4	0.94	346	7	343	6	320	17	108
k29b	19560	8	26	0.008	145266	0.0549	1.0	0.399	1.1	0.0528	0.4	0.94	344	7	341	6	319	17	108
k30	39174	16	54	0.011	288233	0.0533	1.1	0.39	1.1	0.0534	0.4	0.95	335	7	336	6	344	17	97
k31b	5098	2	7	0.011	38119	0.0501	1.0	0.36	1.1	0.0521	0.5	0.90	315	6	313	6	291	21	108
k32	4121	2	6	0.013	30038	0.0517	1.0	0.381	1.1	0.05338	0.6	0.86	325	6	327	6	345	26	94
k33	35677	13	49	0.014	261714	0.0568	1.4	0.419	1.5	0.05344	0.4	0.97	356	10	355	9	347	17	103
k34	12688	3	16	0.011	85831	0.0752	1.1	0.600	1.2	0.05789	0.4	0.94	467	10	477	9	526	17	89
k35	23774	10	34	0.016	176296	0.0517	1.0	0.377	1.1	0.05292	0.4	0.94	325	7	325	6	325	17	100
k35b	25139	10	36	0.017	186677	0.0518	1.2	0.378	1.2	0.0528	0.4	0.95	326	7	325	7	321	17	102
k36	2977	1	4	0.020	22050	0.0548	0.9	0.395	1.2	0.0523	0.7	0.81	344	6	338	7	299	30	115
k36b	2846	1	4	0.020	21549	0.0550	1.0	0.390	1.1	0.05148	0.5	0.88	345	7	335	6	262	25	132
k37	4273	2	6	0.013	32261	0.0510	1.1	0.36	1.2	0.0517	0.4	0.93	321	7	315	6	271	20	118
k38	17648	6	22	0.011	4262	0.0578	1.2	0.445	1.3	0.0558	0.6	0.91	362	9	373	8	445	25	81

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb (cps)	U^* (ppm)	Pb^* (ppm)	Th^\dagger U	^{206}Pb ^{204}Pb	$^{206}\text{Pb}^\ddagger$ ^{238}U	2σ %	$^{207}\text{Pb}^\ddagger$ ^{235}U	2σ %	$^{207}\text{Pb}^\ddagger$ ^{206}Pb	2σ %	$\rho_{\text{ho}}^\#$	^{206}Pb ^{238}U	2σ (Ma)	^{207}Pb ^{235}U	2σ (Ma)	^{207}Pb ^{206}Pb	2σ (Ma)	conc %
6814C1																			
a1	5999	525	27	0.39	11501	0.0507	2.9	0.36	3.7	0.0517	2.3	0.79	319	9	313	10	273	52	116
a2	1923	156	9	0.48	3519	0.0557	3.4	0.416	5.4	0.0542	4.2	0.63	350	12	353	16	379	93	92
a3	4938	448	22	0.70	9414	0.0456	3.5	0.327	4.2	0.0521	2.4	0.83	287	10	287	11	288	54	100
a4	1464	128	7	0.73	2741	0.0515	3.2	0.38	5.8	0.0532	4.8	0.55	324	10	325	16	337	109	96
a5	1255	97	6	0.65	2206	0.0545	3.4	0.43	6.1	0.0567	5.1	0.55	342	11	360	19	480	113	71
a6	1195	107	5	0.43	2332	0.0491	3.4	0.344	5.5	0.0508	4.3	0.62	309	10	300	14	232	100	133
a7	3232	288	15	0.42	6208	0.0523	3.1	0.37	3.9	0.0516	2.4	0.79	329	10	321	11	269	55	122
a8	5470	237	12	0.57	333	0.0416	4.1	0.553	7.2	0.0962	5.9	0.57	263	11	447	26	1552	111	17
a9	2451	224	11	0.40	4695	0.0472	3.2	0.338	4.6	0.0520	3.3	0.69	297	9	296	12	283	76	105
a10	1662	143	8	0.39	3096	0.0528	3.1	0.387	4.8	0.0532	3.7	0.65	332	10	332	14	336	83	99
a11	1084	102	5	0.52	2124	0.0469	3.3	0.330	6.2	0.05099	5.3	0.53	295	9	289	16	240	122	123
a12	4042	222	15	0.61	475	0.0577	3.4	0.405	7.8	0.0508	7.0	0.43	362	12	345	23	233	162	155
a13	2389	222	11	0.38	4422	0.0475	3.5	0.35	5.5	0.0537	4.2	0.64	299	10	306	15	357	95	84
a14	9769	1063	41	0.34	7152	0.0383	3.4	0.28	3.8	0.0529	1.8	0.89	242	8	250	9	325	40	75
a15	1685	155	8	0.49	3169	0.0475	3.2	0.346	5.1	0.05285	4.0	0.62	299	9	302	13	322	91	93
a16	17043	1688	76	0.25	32150	0.0458	3.4	0.332	3.7	0.05258	1.4	0.92	289	10	291	9	311	33	93
a17	1568	151	8	0.49	3034	0.0486	3.5	0.344	5.3	0.05127	4.0	0.66	306	10	300	14	253	91	121
a18	2302	213	11	0.50	4219	0.0498	3.3	0.373	5.2	0.0544	4.0	0.63	313	10	322	14	387	91	81
a19	3174	304	15	0.58	6091	0.0476	3.1	0.340	4.6	0.05179	3.4	0.68	300	9	297	12	276	77	109
a20	2936	276	15	0.41	5359	0.0526	3.1	0.401	5.2	0.0553	4.1	0.60	331	10	342	15	422	92	78
a21	3464	83	8	0.36	111	0.0734	3.9	1.735	9.9	0.17146	9.1	0.40	457	17	1022	66	2572	152	18
a22	8903	1108	60	0.51	16521	0.0539	3.2	0.40	3.5	0.0535	1.4	0.91	338	10	340	10	348	32	97
a23	6563	640	34	0.40	12676	0.0521	3.0	0.37	3.9	0.0513	2.5	0.77	327	9	318	11	255	57	128
a24	4458	407	21	0.40	3144	0.0496	3.2	0.395	5.4	0.05786	4.4	0.58	312	10	338	16	525	96	59
a25	1268	134	7	0.52	2593	0.0477	3.2	0.320	4.8	0.0486	3.5	0.67	301	9	282	12	128	83	234
a26	6436	635	39	1.36	11618	0.0484	3.0	0.370	4.2	0.0554	2.9	0.72	305	9	320	12	427	65	71
a27	1666	169	9	0.48	3249	0.0495	3.2	0.35	5.4	0.0509	4.3	0.60	312	10	303	14	235	98	133
a28	9834	663	36	0.26	703	0.0502	3.4	0.526	4.5	0.0760	2.9	0.76	316	11	429	16	1096	59	29
a29	3136	306	15	0.34	4075	0.0492	3.6	0.37	5.2	0.0541	3.8	0.68	310	11	317	14	374	86	83
a30	9937	1099	45	0.34	8685	0.0400	3.2	0.30	4.0	0.0544	2.3	0.81	253	8	266	9	389	52	65
a31	1942	198	10	0.47	3713	0.0486	3.1	0.35	4.7	0.0518	3.6	0.66	306	9	302	12	278	82	110
a32	1848	201	10	0.44	3503	0.0475	3.1	0.34	4.7	0.0521	3.5	0.66	299	9	298	12	291	81	103
a33	3166	352	18	0.63	6214	0.0497	3.1	0.35	4.0	0.0506	2.5	0.77	312	9	302	11	221	59	142
a34	6555	712	34	0.23	12429	0.0491	3.1	0.354	3.6	0.05225	1.8	0.87	309	9	308	10	296	41	104
a35	5141	537	25	0.41	4689	0.0443	3.2	0.34	4.2	0.0564	2.7	0.77	279	9	301	11	467	60	60
a36	1544	174	8	0.48	2951	0.0452	3.3	0.323	5.2	0.0519	4.0	0.64	285	9	284	13	279	91	102
a37	2940	310	16	0.46	5549	0.0506	3.1	0.37	4.7	0.0525	3.5	0.66	318	10	317	13	309	81	103
a38	1229	120	7	0.75	2368	0.0505	3.0	0.358	4.7	0.0515	3.7	0.63	318	9	311	13	262	84	121
a39	1125	110	6	0.71	2143	0.0466	3.5	0.335	6.7	0.0520	5.7	0.52	294	10	293	17	287	131	102
a40	1147	105	5	0.56	2218	0.0484	3.0	0.346	7.1	0.0519	6.4	0.43	305	9	302	19	280	146	109
a41	12184	1268	38	0.29	10534	0.0296	3.3	0.215	3.6	0.0528	1.4	0.92	188	6	198	7	320	32	59
a42	1578	134	7	0.57	3077	0.0484	3.4	0.340	5.2	0.0509	4.0	0.65	304	10	297	14	238	91	128
a43	4319	413	16	0.20	8139	0.0391	3.3	0.284	4.1	0.0527	2.5	0.80	247	8	254	9	315	56	79
a44	4438	278	15	0.71	1294	0.0472	3.2	0.337	6.3	0.0518	5.4	0.51	297	9	295	16	276	124	108
a45	1607	129	6	0.37	3201	0.0505	3.3	0.348	4.9	0.0500	3.7	0.67	318	10	304	13	196	86	162
a46	1958	121	6	0.35	3364	0.0503	3.1	0.401	6.0	0.0578	5.1	0.52	317	10	342	18	521	113	61
a47	1619	104	5	0.48	3012	0.0454	3.4	0.337	5.8	0.0538	4.7	0.58	286	9	295	15	363	106	79
a48	4902	265	14	1.07	1870	0.0422	3.5	0.320	4.9	0.0550	3.4	0.72	266	9	282	12	413	76	64
a49	1382	80	4	0.48	2359	0.0471	3.0	0.347	4.5	0.0535	3.3	0.68	296	9	302	12	349	74	85
a50	1452	85	4	0.51	2739	0.0454	3.1	0.329	6.6	0.0525	5.9	0.47	286	9	288	17	309	134	93
a51	7064	228	14	0.67	535	0.0556	3.1	0.406	5.6	0.0529	4.7	0.55	349	10	346	17	324	107	108
a52	2561	135	7	0.45	4782	0.0488	3.2	0.358	4.9	0.0531	3.6	0.67	307	10	311	13	334	82	92
a53	1568	82	4	0.53	2994	0.0489	3.1	0.351	5.4	0.0520	4.4	0.58	308	9	305	14	287	101	107
a54	2891	139	7	0.45	5419	0.0471	3.1	0.344	4.6	0.0529	3.3	0.68	297	9	300	12	323	75	92
a55	2338	111	5	0.39	1994	0.0473	3.2	0.354	5.6	0.0542	4.5	0.57	298	9	308	15	380	102	78
a56	2077	101	5	0.57	4115	0.0478	3.1	0.330	4.8	0.0501	3.7	0.65	301	9	289	12	199	86	151
a57	1704	79	4	0.51	3262	0.0459	3.2	0.328	5.4	0.0518	4.4	0.59	289	9	288	14	278	101	104
a58	2501	111	5	0.50	4915	0.0471	3.7	0.327	5.2	0.0503	3.7	0.71	297	11	287				

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\ddagger}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U		%	%		%		%		(Ma)	(Ma)		(Ma)		%		
6814B1																				
a1	1540	117	6	0.69	2457	0.0458	3.1	0.39	5.7	0.0616	4.7	0.55	288	9	333	16	661	102	44	
a2	1297	100	5	0.67	2411	0.0497	3.1	0.36	6.0	0.0527	5.1	0.53	313	10	313	16	317	115	99	
a3	18698	1717	74	0.37	7958	0.0427	2.7	0.31	3.1	0.0526	1.5	0.87	270	7	274	8	312	35	86	
a4	4535	363	18	0.43	8372	0.0476	2.8	0.35	3.9	0.0534	2.8	0.71	300	8	305	10	348	62	86	
a5	1598	144	7	0.53	3116	0.0465	2.9	0.32	6.2	0.0496	5.4	0.47	293	8	280	15	176	127	167	
a6	6180	353	18	0.46	984	0.0472	2.8	0.45	4.3	0.0687	3.3	0.64	297	8	375	14	891	68	33	
a7	1335	102	5	0.65	2076	0.0475	3.3	0.39	7.3	0.0602	6.5	0.45	299	10	337	21	611	140	49	
a8	11126	1337	48	0.47	4555	0.0340	3.5	0.25	4.3	0.0540	2.4	0.82	215	7	229	9	373	55	58	
a9	2108	171	9	0.53	3753	0.0484	3.7	0.37	6.1	0.0551	4.8	0.61	305	11	318	17	417	107	73	
a10	1687	149	7	0.48	3188	0.0465	3.5	0.34	6.6	0.0523	5.5	0.54	293	10	294	17	300	126	98	
a11	12865	1226	54	0.42	14426	0.0442	3.1	0.32	3.9	0.0528	2.3	0.80	279	9	284	10	322	53	87	
a12	4234	360	18	0.37	4467	0.0486	3.0	0.37	4.8	0.0554	3.7	0.64	306	9	321	13	430	82	71	
a13	5415	468	24	0.30	10056	0.0515	2.7	0.38	4.1	0.0532	3.0	0.67	324	9	326	11	338	69	96	
a14	1609	143	7	0.49	3013	0.0497	2.8	0.36	4.5	0.0528	3.5	0.62	313	9	314	12	320	81	98	
a15	1657	148	8	0.64	2950	0.0470	3.6	0.36	6.0	0.0554	4.8	0.61	296	10	311	16	427	106	69	
a16	2813	260	14	0.61	5317	0.0497	2.9	0.36	4.0	0.0522	2.8	0.71	313	9	310	11	293	65	107	
a17	3167	283	15	0.79	1468	0.0482	2.8	0.39	4.3	0.0583	3.2	0.66	303	8	332	12	541	71	56	
a18	5493	501	25	0.49	10255	0.0475	2.9	0.35	3.6	0.0529	2.2	0.79	299	8	302	10	323	51	93	
a19	16178	1608	75	0.37	5440	0.0453	2.8	0.33	3.2	0.0536	1.5	0.89	285	8	293	8	353	33	81	
a20	5906	680	22	0.30	6017	0.0320	3.0	0.24	3.8	0.0536	2.3	0.79	203	6	215	7	355	52	57	
a21	12759	1274	77	0.21	23837	0.0472	3.1	0.34	3.8	0.0528	2.1	0.83	297	9	300	10	320	48	93	
a22	1102	103	6	0.53	1864	0.0522	2.9	0.38	6.0	0.0531	5.3	0.48	328	9	329	17	333	120	99	
a23	6826	609	35	0.32	3664	0.0577	3.3	0.45	5.0	0.0561	3.7	0.67	362	12	374	16	455	82	80	
a24	1003	95	5	0.64	1848	0.0500	3.1	0.36	6.4	0.0527	5.6	0.49	314	10	315	17	318	127	99	
a27	1028	86	5	0.47	1706	0.0573	3.2	0.47	7.3	0.0595	6.6	0.44	359	11	391	24	585	142	61	
a28	1170	85	7	0.30	2053	0.0873	3.5	0.66	8.6	0.0551	7.8	0.41	540	18	517	35	418	175	129	
a29	257	15	1	0.36	356	0.0676	5.8	0.66	15.8	0.0706	14.7	0.37	422	24	513	66	945	301	45	
a30	776	64	4	0.57	704	0.0580	3.3	0.48	7.7	0.0603	6.9	0.43	363	12	399	26	614	150	59	
a31	1845	193	9	0.66	3571	0.0442	2.9	0.31	4.2	0.0510	3.1	0.68	279	8	275	10	239	70	116	
a32	3703	411	19	0.61	6993	0.0432	2.8	0.31	3.9	0.0524	2.7	0.72	273	8	276	10	304	62	90	
a33	2584	285	13	0.44	5009	0.0460	2.9	0.32	4.6	0.0509	3.6	0.64	290	8	284	12	237	82	122	
a34	1654	179	8	0.60	3131	0.0443	3.2	0.32	4.8	0.0521	3.5	0.67	280	9	281	12	289	81	97	
a35	2853	302	15	0.47	3594	0.0491	2.8	0.38	4.1	0.0563	3.1	0.68	309	8	328	12	466	68	66	
a36	8650	915	41	0.27	10749	0.0447	2.8	0.32	3.4	0.0520	2.0	0.81	282	8	282	8	285	46	99	
a37	1776	145	10	0.60	3337	0.0642	3.2	0.47	5.4	0.0526	4.3	0.60	401	13	388	17	310	97	129	
a38	2103	172	11	0.59	3944	0.0597	3.2	0.43	5.0	0.0525	3.8	0.65	374	12	365	16	309	87	121	
a39	2307	162	11	0.28	4078	0.0690	3.4	0.53	5.6	0.0555	4.4	0.61	430	14	430	20	431	98	100	
a40	933	66	4	0.53	1723	0.0611	4.0	0.44	9.4	0.0520	8.5	0.43	382	15	369	29	287	194	133	
a41	1808	146	8	0.46	3444	0.0507	2.7	0.36	4.7	0.0518	3.8	0.58	319	9	314	13	277	87	115	
a42	5197	434	25	1.02	9888	0.0502	2.7	0.36	3.7	0.0519	2.6	0.73	316	8	312	10	280	58	113	
a43	1315	99	5	0.66	2428	0.0465	3.0	0.34	6.2	0.0531	5.4	0.49	293	9	297	16	331	123	88	
a44	3644	261	13	0.53	7061	0.0472	2.9	0.33	3.9	0.0510	2.5	0.75	297	8	291	10	239	59	124	
a45	1516	100	5	0.53	2888	0.0511	2.8	0.37	5.3	0.0519	4.6	0.52	321	9	316	15	281	104	114	
a46	1538	97	5	0.54	2921	0.0521	3.1	0.37	7.3	0.0518	6.6	0.42	327	10	321	20	278	152	118	
a47	2799	196	8	0.25	3198	0.0407	3.2	0.29	6.8	0.0511	6.0	0.47	257	8	256	16	244	138	105	
a48	1508	80	4	0.85	2822	0.0442	2.8	0.33	5.9	0.0534	5.1	0.48	279	8	286	15	347	116	80	
a49	4181	222	12	0.60	8050	0.0489	3.0	0.35	4.0	0.0513	2.7	0.75	308	9	302	11	253	61	121	
a50	5280	318	17	0.55	6918	0.0503	2.8	0.41	4.8	0.0587	3.9	0.59	316	9	347	14	554	85	57	
a51	1622	91	4	0.61	3177	0.0458	2.9	0.32	4.9	0.0503	3.9	0.60	289	8	280	12	210	90	137	
a52	973	49	3	0.60	1898	0.0509	2.9	0.36	6.1	0.0506	5.3	0.48	320	9	309	16	220	123	145	
a53	1941	77	4	0.84	1394	0.0464	4.0	0.40	6.9	0.0627	5.7	0.58	292	11	342	20	697	121	42	
a54	1767	55	3	0.59	577	0.0494	2.9	0.50	5.6	0.0731	4.8	0.52	311	9	411	19	1017	97	31	
a55	3209	148	8	0.70	6034	0.0483	3.1	0.35	4.6	0.0524	3.4	0.68	304	9	304	12	304	77	100	
a56	18084	1282	40	0.10	5884	0.0278	2.9	0.21	3.3	0.0542	1.7	0.86	177	5	192	6	380	39	46	
a57	4273	152	7	0.44	2926	0.0468	3.5	0.37	4.8	0.0571	3.3	0.73	295	10	319	13	497	73	59	
a58	2238	90	5	0.87	3973	0.0462	3.0	0.36	5.4	0.0558	4.5	0.56	291	9	309	14	443	99	66	
a59	1008	39	2	0.59	1872	0.0480	3.1	0.35	5.0	0.0531	3.9	0.62	302	9	306	13	334	88	91	
a60	2713	107	5	0.48	5152	0.0429	2.8	0.31	3.9	0.0521	2.8	0.70	271	7	273	9	288	64		

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U ⁺	Pb ⁺	Th [†]	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^{\$}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^{\$}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^{\$}}{^{206}\text{Pb}}$	2 σ	$\rho\text{o}^{\#}$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U			%			%		%		(Ma)		(Ma)		(Ma)		%
6814A1																				
a1	2497	252	12	0.36	4693	0.0465	3.0	0.34	4.9	0.0532	3.8	0.62	293	9	298	13	338	87	87	
a2	2651	302	14	0.52	5090	0.0455	4.1	0.327	7.2	0.0520	6.0	0.57	287	11	287	18	287	136	100	
a3	855	88	4	0.48	1641	0.0491	3.2	0.354	7.4	0.0523	6.7	0.44	309	10	308	20	299	152	103	
a4	7221	149	25	0.31	9739	0.1653	3.0	1.69	4.0	0.0742	2.7	0.74	986	27	1005	26	1047	55	94	
a5	1119	116	5	0.31	2163	0.0457	3.0	0.33	5.6	0.0517	4.7	0.54	288	8	286	14	272	108	106	
a6	2055	211	9	0.42	3840	0.0446	3.2	0.329	5.1	0.0535	4.0	0.62	281	9	289	13	349	91	81	
a7	1746	182	9	0.39	3421	0.0469	3.1	0.33	6.0	0.0510	5.2	0.51	295	9	289	15	240	119	123	
a8	3763	98	17	1.02	5457	0.1450	3.0	1.377	3.8	0.0689	2.3	0.80	873	25	879	23	895	47	98	
a9	632	73	3	0.52	1256	0.0457	3.6	0.317	7.3	0.0504	6.4	0.49	288	10	280	18	214	148	135	
a10	45208	7695	177	0.13	1323	0.0236	4.3	0.166	4.5	0.0510	1.5	0.94	151	6	156	7	242	35	62	
a11	758	88	4	0.33	1549	0.0486	4.2	0.329	8.1	0.04903	6.9	0.52	306	13	289	21	149	162	205	
a12	10093	72	27	1.22	8123	0.2993	3.6	5.128	3.8	0.1243	1.3	0.94	1688	54	1841	33	2018	24	84	
a13	550	55	3	0.30	1026	0.0515	3.9	0.38	7.8	0.0537	6.7	0.50	324	12	328	22	359	152	90	
a14	1947	228	11	0.77	3901	0.0461	3.8	0.32	5.0	0.0499	3.2	0.76	291	11	280	12	192	76	152	
a15	1927	219	10	0.33	3654	0.0459	3.3	0.334	4.9	0.05278	3.6	0.67	289	9	293	12	319	83	91	
a16	1737	193	9	0.32	2045	0.0473	3.4	0.341	5.5	0.05233	4.3	0.62	298	10	298	14	300	98	99	
a17	1736	191	9	0.30	3233	0.0464	3.1	0.344	4.7	0.05381	3.5	0.66	292	9	300	12	363	79	81	
a18	17646	1639	79	0.21	1492	0.0488	3.3	0.420	4.1	0.0624	2.4	0.81	307	10	356	12	688	51	45	
a19	1615	146	6	0.33	1193	0.0417	11.0	0.403	22.1	0.07004	19.2	0.50	264	28	344	67	930	394	28	
a20	1990	190	10	0.33	3641	0.0537	3.5	0.405	4.6	0.0547	2.9	0.77	337	12	346	13	401	65	84	
a21	93420	456	165	0.12	57096	0.3515	3.5	7.926	3.7	0.16353	1.1	0.95	1942	59	2223	34	2493	19	78	
a22	1478	161	8	0.32	2797	0.0489	3.0	0.36	5.4	0.0527	4.5	0.55	308	9	309	15	317	103	97	
a23	2939	121	15	0.86	4119	0.1089	3.4	0.96	5.0	0.0642	3.6	0.69	666	22	685	25	747	76	89	
a24	2804	168	14	0.44	4767	0.0818	3.2	0.664	4.7	0.05884	3.5	0.66	507	15	517	19	561	77	90	
a25	996	114	6	0.60	2055	0.0498	3.2	0.333	6.0	0.0486	5.1	0.54	313	10	292	15	127	120	246	
a26	2479	69	13	1.33	3695	0.1555	3.1	1.442	5.2	0.0673	4.2	0.60	932	27	907	32	846	87	110	
a27	3387	333	16	0.31	6285	0.0490	3.3	0.36	4.2	0.0539	2.5	0.79	308	10	316	11	368	57	84	
a28	890	82	5	0.46	1782	0.0624	3.5	0.429	7.3	0.0499	6.4	0.48	390	13	363	23	188	149	208	
a29	714	76	3	0.57	1363	0.0434	4.1	0.31	7.1	0.0523	5.8	0.57	274	11	276	17	296	133	92	
a30	2340	251	13	0.59	4495	0.0476	3.3	0.34	4.7	0.0522	3.3	0.71	300	10	299	12	294	75	102	
a31	4007	362	19	0.63	1103	0.0491	3.4	0.42	6.6	0.0619	5.6	0.52	309	10	355	20	670	121	46	
a32	929	108	5	0.40	1808	0.0473	3.6	0.34	7.5	0.0515	6.5	0.49	298	11	294	19	263	150	113	
a33	10016	404	44	0.42	15974	0.1058	2.9	0.92	3.3	0.0628	1.6	0.87	649	18	661	16	703	35	92	
a34	1823	207	10	0.43	3585	0.0476	3.3	0.334	5.0	0.05083	3.7	0.66	300	10	292	13	233	86	129	
a35	7463	176	31	0.65	10002	0.1618	2.9	1.67	3.4	0.0747	1.7	0.87	967	26	996	22	1059	34	91	
a36	17439	614	78	0.23	25862	0.1312	3.2	1.220	3.4	0.0674	1.2	0.94	795	24	810	19	851	24	93	
a37	4419	611	21	0.15	8463	0.0369	3.0	0.27	4.2	0.0525	2.9	0.72	233	7	240	9	308	66	76	
a38	4419	574	20	0.15	8463	0.0369	3.0	0.267	4.2	0.0525	2.9	0.72	234	7	240	9	308	66	76	
a39	15236	1075	63	0.12	1202	0.0611	2.9	0.543	3.3	0.0645	1.6	0.88	382	11	440	12	757	33	50	
a40	2289	109	6	0.45	347	0.0474	3.4	0.578	11.6	0.0884	11.1	0.29	298	10	463	44	1392	213	21	
a41	2920	237	11	0.39	3844	0.0458	3.2	0.343	5.5	0.0542	4.4	0.58	289	9	299	14	380	100	76	
a42	2713	190	10	0.36	5031	0.0536	3.4	0.399	4.9	0.0540	3.6	0.69	336	11	341	14	372	81	90	
a43	1980	149	6	0.39	3796	0.0424	3.2	0.306	5.2	0.0525	4.2	0.61	267	8	271	13	305	95	88	
a44	4173	73	11	0.58	6178	0.1466	3.0	1.367	3.9	0.0676	2.4	0.78	882	25	875	23	857	50	103	
a45	9103	48	20	1.82	8556	0.3258	3.0	4.768	3.6	0.1061	2.0	0.84	1818	48	1779	31	1734	36	105	
a46	1077	67	3	0.42	2017	0.0498	3.5	0.371	7.8	0.0541	7.0	0.45	313	11	320	22	374	158	84	
a47	2666	185	9	0.19	4865	0.0525	3.1	0.394	4.8	0.0544	3.7	0.65	330	10	337	14	389	82	85	
a48	2185	135	6	0.74	3998	0.0419	5.8	0.319	9.1	0.0552	7.1	0.63	265	15	281	23	421	158	63	
a49	7725	862	21	0.11	5345	0.0254	3.0	0.189	3.6	0.0539	2.0	0.82	162	5	175	6	366	46	44	
a50	23285	2593	50	0.16	2297	0.0195	4.1	0.140	5.8	0.0520	4.1	0.71	125	5	133	7	284	93	44	
a51	717	32	2	0.59	1286	0.0479	6.4	0.415	22.6	0.0628	21.7	0.28	302	19	352	70	700	462	43	
a52	661	31	2	0.55	1202	0.0480	3.6	0.362	6.3	0.0547	5.2	0.57	302	11	314	17	400	117	76	
a53	635	29	2	0.53	1169	0.0506	3.7	0.377	8.0	0.0540	7.1	0.46	318	12	325	23	372	160	86	
a54	1506	67	3	0.42	2699	0.0488	3.5	0.375	5.4	0.0557	4.1	0.65	307	11	323	15	442	91	70	
a55	10556	591	21	0.12	1429	0.0364	3.9	0.317	4.2	0.0632	1.6	0.93	230	9	280	10	714	33	32	
a56	14977	30	15	1.27	10041	0.4025	4.0	8.290	4.9	0.1494	2.7	0.83	2180	75	2263	45	2339	46	93	
a57	15502	709	31	0.26	11817	0.0450	3.4	0.319	3.8	0.0515	1.7	0.90	284	9	281	9	262	39	108	
a58	2070	80	4	0.51	3673	0.0453	3.8	0.352	5.7	0.0564	4.2	0.								

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U		%			%			%		(Ma)		(Ma)		(Ma)		
6812D1																				
1	11983	5	16.97	0.01	1355	0.0500	2.0	0.29	2.0	0.0418	0.2	0.99	314	12	257	9	-239	12	-132	
2	13679	6	18.68	0.01	987	0.0502	1.9	0.268	2.0	0.0387	0.3	0.98	316	12	241	8	-439	18	-72	
3	50249	22	67.09	0.01	1962	0.0461	2.1	0.301	2.1	0.0473	0.2	1.00	291	12	267	10	63	10	460	
5	10117	5	14.04	0.01	5383	0.0467	2.0	0.32	2.0	0.0497	0.2	0.99	294	11	282	10	183	11	161	
6	25457	12	35.16	0.01	1953	0.0448	2.2	0.286	2.3	0.0464	0.3	0.99	282	12	256	10	17	17	1688	
7	19749	8	28.11	0.01	12683	0.0495	2.1	0.36	2.1	0.0521	0.2	1.00	311	12	309	11	288	9	108	
8	12317	3	15.72	0.01	6833	0.0736	2.0	0.566	2.0	0.0558	0.2	0.99	458	17	456	14	446	11	103	
9	10668	4	13.64	0.00	30072	0.0546	1.9	0.407	2.0	0.0540	0.3	0.99	343	13	346	11	372	12	92	
10	7115	1	9.55	0.02	46736	0.0927	1.9	0.756	2.0	0.0591	0.3	0.99	572	21	572	17	572	11	100	
11	16550	8	24.23	0.02	123267	0.0466	2.0	0.335	2.0	0.0522	0.2	0.99	294	11	294	10	293	10	100	
11b	16456	8	24.02	0.01	122434	0.0459	2.0	0.330	2.0	0.05220	0.2	0.99	289	11	290	10	294	11	98	
12	48993	21	65.44	0.01	10343	0.0477	2.0	0.344	2.0	0.0524	0.2	1.00	300	12	301	11	304	9	99	
13	12373	6	17.32	0.01	91727	0.0463	2.0	0.33	2.0	0.0523	0.2	0.99	292	11	293	10	298	10	98	
17	26127	3	27.69	0.02	10625	0.1583	1.9	1.58	2.0	0.0726	0.3	0.99	947	34	964	24	1002	10	95	
18	43255	18	51.47	0.01	580	0.0442	2.6	0.213	2.8	0.03500	1.1	0.92	279	14	196	10	-708	61	-39	
19	44641	20	59.49	0.01	3226	0.0462	2.2	0.316	2.2	0.04968	0.2	1.00	291	12	279	11	180	10	162	
20	55947	25	73.24	0.01	2703	0.0473	2.5	0.324	2.5	0.04968	0.2	1.00	298	15	285	13	180	11	166	
21	53200	24	66.49	0.01	996	0.0424	2.3	0.251	2.4	0.0429	0.5	0.97	268	12	227	10	-172	26	-155	
22	16639	7	23.46	0.01	3404	0.0479	1.9	0.323	2.0	0.04885	0.2	1.00	302	11	284	10	140	9	215	
23	35838	17	46.65	0.01	1650	0.0424	2.2	0.274	2.2	0.0469	0.2	0.99	268	11	246	9	43	11	628	
24	11868	5	17.72	0.02	11980	0.0477	2.0	0.336	2.0	0.05110	0.2	0.99	300	12	294	10	245	10	122	
25	6605	3	9.25	0.01	49171	0.0470	2.0	0.34	2.0	0.0519	0.3	0.99	296	11	294	10	282	13	105	
27	21979	10	30.38	0.01	162708	0.0466	1.9	0.34	2.0	0.0525	0.2	0.99	293	11	295	10	307	10	96	
28	18140	8	27.62	0.02	134574	0.0464	1.9	0.334	2.0	0.05232	0.2	0.99	292	11	293	10	299	10	98	
29	8707	4	12.42	0.01	65074	0.0458	2.0	0.327	2.0	0.0518	0.2	0.99	289	11	287	10	275	10	105	
30	34823	15	51.72	0.02	4471	0.0485	2.1	0.341	2.1	0.0510	0.3	0.99	305	12	298	11	241	14	127	
31	24744	11	33.98	0.01	4472	0.0472	2.0	0.33	2.0	0.0509	0.4	0.98	297	11	291	10	237	17	126	
32	18521	9	26.77	0.01	137050	0.0460	1.9	0.332	2.0	0.0524	0.2	0.99	290	11	291	10	305	9	95	
32b	20054	9	29.20	0.01	148508	0.0461	2.1	0.33	2.2	0.0525	0.3	0.99	291	12	292	11	305	13	95	
33	19600	8	26.38	0.01	142476	0.0506	2.2	0.37	2.2	0.0532	0.3	0.99	318	14	321	12	338	11	94	
34	44151	19	57.46	0.01	7841	0.0471	2.1	0.34	2.1	0.0526	0.2	0.99	297	12	298	11	310	11	96	
34b	49266	21	63.91	0.01	5514	0.0476	2.2	0.34	2.2	0.0521	0.2	0.99	300	13	299	11	289	11	104	
35	45356	20	57.30	0.01	1510	0.0436	2.1	0.28	2.1	0.0466	0.4	0.98	275	11	251	9	28	19	998	
36	37985	17	49.65	0.01	5160	0.0452	2.2	0.32	2.3	0.0520	0.3	0.99	285	12	285	11	284	15	101	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U		%		$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	%	$\frac{^{206}\text{Pb}}{^{206}\text{Pb}}$	%		(Ma)		$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	(Ma)		%		
TS12a																				
a1	2036	179	6	0.13	748	0.0346	7.7	0.32	13.1	0.0667	10.5	0.59	219	17	280	33	829	220	26	
a2	5169	518	21	0.16	3178	0.0419	3.0	0.304	8.6	0.0526	8.1	0.35	265	8	270	21	311	184	85	
a3	724	52	2	0.10	161	0.0409	2.6	0.479	34.0	0.0849	33.9	0.08	258	7	397	119	1314	658	20	
a6	7507	595	23	0.15	2678	0.0392	3.0	0.315	4.3	0.0584	3.0	0.71	248	7	278	10	544	66	46	
a8	4791	359	16	0.23	619	0.0431	4.8	0.478	10.0	0.0804	8.7	0.48	272	13	397	33	1208	172	23	
a9	2658	229	10	0.30	531	0.0430	3.1	0.473	7.0	0.0799	6.2	0.45	271	8	393	23	1193	123	23	
a10	7762	601	24	0.25	1396	0.0392	5.7	0.371	9.6	0.0686	7.8	0.59	248	14	320	27	886	160	28	
a11	4964	528	26	0.14	1277	0.0502	3.1	0.373	7.6	0.05389	6.9	0.40	316	9	322	21	366	156	86	
a12	1192	111	6	0.20	1916	0.0521	6.7	0.483	30.2	0.0672	29.5	0.22	327	21	400	105	844	613	39	
a14	1367	123	5	0.31	2512	0.0426	3.7	0.33	6.6	0.0558	5.4	0.57	269	10	288	17	445	121	60	
a15	10054	630	29	0.21	3768	0.0452	2.8	0.374	4.9	0.06001	4.1	0.56	285	8	322	14	604	89	47	
a17	58304	6419	247	0.02	5197	0.0385	4.2	0.287	4.4	0.05412	1.5	0.94	244	10	257	10	376	34	65	
a18	7115	659	28	0.25	1306	0.0429	9.0	0.369	10.1	0.0624	4.6	0.89	271	24	319	28	687	97	39	
a19	18037	631	21	0.13	272	0.0233	49.5	0.215	52.7	0.06680	18.3	0.94	149	73	198	99	832	381	18	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc
	(cps)	(ppm)	(ppm)	U		%	%		%		%		(Ma)		(Ma)		(Ma)		%
TS20a																			
a1	4480	385	17	0.12	3913	0.0471	5.7	0.38	6.6	0.0591	3.4	0.86	297	17	330	19	571	74	52
a2	4711	426	21	0.16	1579	0.0508	4.4	0.433	6.3	0.0619	4.5	0.70	319	14	365	20	669	97	48
a3	2651	246	11	0.21	4668	0.0469	4.4	0.371	6.0	0.0574	4.0	0.74	296	13	321	17	506	89	58
a4	3546	365	14	0.11	6680	0.0406	4.3	0.29	11.7	0.0514	10.8	0.37	256	11	257	27	259	249	99
a5	5392	593	22	0.14	5167	0.0388	4.1	0.28	5.2	0.0520	3.1	0.80	246	10	249	12	285	72	86
a6	6701	743	27	0.15	12648	0.0377	4.1	0.276	5.0	0.0530	2.8	0.82	238	10	247	11	330	64	72
a7	5688	622	24	0.15	10860	0.0406	4.3	0.29	4.7	0.0523	1.9	0.92	256	11	261	11	299	43	86
a8	5688	626	24	0.15	10860	0.0405	4.3	0.292	4.7	0.0523	1.9	0.92	256	11	260	11	299	43	86
a9	4810	522	21	0.10	9078	0.0417	4.3	0.299	6.6	0.0519	5.1	0.64	263	11	265	16	282	117	93
a11	6739	753	31	0.11	13038	0.0433	4.1	0.309	4.6	0.0518	2.1	0.89	273	11	274	11	276	48	99
a12	7645	780	33	0.13	14472	0.0440	4.1	0.321	4.5	0.0529	1.8	0.92	278	11	283	11	326	40	85
a13	41	799	32	0.13	120	0.0435	4.1	0.309	13.7	0.0516	13.1	0.30	274	11	274	33	268	299	103
a14	11929	1277	57	0.18	13282	0.0463	4.1	0.337	4.7	0.0528	2.4	0.87	292	12	295	12	321	54	91
a15	8308	870	37	0.13	15343	0.0440	4.1	0.329	4.4	0.0542	1.6	0.93	278	11	289	11	378	36	73
a16	10065	795	34	0.16	673	0.0428	4.5	0.292	7.3	0.0495	5.8	0.61	270	12	260	17	173	135	157
a17	10495	1130	48	0.20	19393	0.0433	4.2	0.320	4.6	0.0536	1.8	0.92	273	11	282	11	353	41	77
a18	8280	950	39	0.16	3774	0.0435	4.3	0.331	5.1	0.0552	2.8	0.84	275	11	290	13	419	62	65
a19	8325	898	37	0.16	3686	0.0437	4.3	0.318	5.8	0.0528	3.9	0.74	276	12	280	14	322	90	86
a20	10676	1232	50	0.14	12080	0.0420	4.3	0.302	4.8	0.0521	2.1	0.90	265	11	268	11	288	48	92
a21	5818	682	28	0.14	10854	0.0433	4.4	0.321	4.9	0.0537	2.2	0.90	273	12	282	12	358	49	76
a22	7056	748	34	0.13	9661	0.0482	4.2	0.345	6.5	0.0519	5.0	0.64	304	12	301	17	282	114	108
a23	10674	1178	53	0.13	20245	0.0467	4.1	0.340	4.5	0.0528	1.8	0.92	294	12	297	12	318	40	92
a24	7478	876	37	0.12	13982	0.0442	4.2	0.327	5.1	0.0537	2.9	0.82	279	11	288	13	359	66	78
a25	5367	601	27	0.10	9856	0.0469	4.1	0.354	5.5	0.0547	3.6	0.75	296	12	307	15	398	82	74
a26	5680	667	29	0.20	10867	0.0454	4.1	0.328	4.6	0.0524	2.1	0.89	286	12	288	12	302	48	95
a27	10524	1233	51	0.17	3331	0.0426	4.2	0.311	4.9	0.0529	2.5	0.86	269	11	275	12	324	57	83
a28	9564	1219	49	0.16	14197	0.0413	4.1	0.292	5.1	0.0513	3.0	0.81	261	10	260	12	256	69	102
a29	9369	1128	47	0.15	5590	0.0434	4.2	0.312	5.1	0.0522	2.9	0.82	274	11	276	12	293	67	93
a30	6559	750	34	0.10	12411	0.0473	4.2	0.346	5.0	0.0530	2.6	0.85	298	12	302	13	329	59	91
a31	8736	951	42	0.10	16398	0.0468	4.3	0.345	4.6	0.0534	1.8	0.92	295	12	301	12	344	40	86
a32	8771	1023	46	0.10	16510	0.0468	4.3	0.343	4.6	0.0532	1.8	0.92	295	12	300	12	338	40	87
a33	6559	784	35	0.10	12411	0.0470	4.2	0.343	5.0	0.0530	2.6	0.85	296	12	300	13	329	59	90
a34	8410	1058	42	0.13	3835	0.0414	4.2	0.314	5.0	0.0550	2.7	0.84	262	11	277	12	411	60	64
a35	6052	1130	54	0.15	1767	0.0503	4.9	0.383	9.0	0.0552	7.5	0.55	316	15	329	26	422	168	75
a36	10396	1412	56	0.17	7795	0.0399	4.2	0.297	4.5	0.0540	1.6	0.93	252	10	264	11	370	37	68
a37	7389	933	37	0.13	14140	0.0415	4.2	0.300	4.7	0.0523	2.1	0.89	262	11	266	11	300	48	88
a38	10707	1314	51	0.16	20531	0.0399	4.2	0.288	4.7	0.0522	2.0	0.90	252	10	257	11	296	46	85
a39	5713	597	26	0.16	10510	0.0460	4.5	0.345	5.0	0.0544	2.2	0.90	290	13	301	13	387	49	75
a40	5741	620	24	0.13	10920	0.0406	4.3	0.295	5.2	0.0528	2.9	0.83	256	11	263	12	320	65	80
a41	4543	503	19	0.13	8773	0.0391	4.3	0.279	4.9	0.0517	2.3	0.89	247	11	250	11	272	52	91
a42	4130	371	16	0.16	7964	0.0443	4.5	0.317	5.3	0.0520	2.8	0.84	279	12	280	13	285	65	98
a43	4789	350	13	0.19	579	0.0362	4.5	0.357	5.7	0.0717	3.5	0.79	229	10	310	15	978	72	23
a44	2655	241	8	0.14	4969	0.0337	4.9	0.248	5.9	0.0535	3.2	0.84	213	10	225	12	351	72	61
a45	5444	484	18	0.16	5657	0.0374	4.4	0.273	5.3	0.0529	3.0	0.82	237	10	245	12	325	69	73
a46	5803	474	17	0.23	10672	0.0366	4.5	0.274	5.0	0.0543	2.2	0.90	232	10	246	11	382	48	61
a47	11349	829	32	0.09	18598	0.0403	4.3	0.298	4.6	0.0537	1.8	0.92	255	11	265	11	357	41	71
a48	9606	782	31	0.17	18528	0.0399	4.2	0.285	4.5	0.0518	1.6	0.94	252	10	254	10	278	36	91
a49	8168	561	24	0.14	8461	0.0446	4.3	0.322	4.8	0.0524	2.0	0.91	281	12	283	12	301	44	93
a50	7512	477	19	0.16	2107	0.0405	4.5	0.342	5.9	0.0613	3.8	0.76	256	11	299	15	649	82	39
a51	9667	658	27	0.15	10185	0.0416	4.2	0.306	4.6	0.0533	1.9	0.91	263	11	271	11	344	44	76
a52	7473	491	20	0.12	14298	0.0417	4.1	0.300	4.6	0.0523	2.1	0.89	263	11	267	11	298	48	88
a53	9089	587	21	0.13	17374	0.0377	4.1	0.273	4.7	0.0524	2.3	0.88	239	10	245	10	303	51	79
a54	6306	394	15	0.13	11987	0.0396	4.2	0.288	4.7	0.0527	2.1	0.89	251	10	257	11	315	49	79
a55	8082	477	19	0.14	4783	0.0400	4.1	0.305	4.7	0.0552	2.2	0.88	253	10	270	11	422	50	60
a56	10413	571	23	0.09	6188	0.0422	4.2	0.323	5.3	0.0555	3.2	0.80	266	11	284	13	431	71	62
a57	8453	462	20	0.12	8289	0.0453	4.1	0.325	4.7	0.0521	2.3	0.88	286	12	286	12	290	52	99

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\S}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\S}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U		%		$\frac{^{206}\text{Pb}}{^{235}\text{U}}$	%	$\frac{^{206}\text{Pb}}{^{206}\text{Pb}}$	%		(Ma)		$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	(Ma)		%		
96TS2																				
a1	8064	665	24	0.16	15261	0.0370	4.7	0.27	5.9	0.0526	3.7	0.79	234	11	241	13	314	84	75	
a2	3758	300	12	0.13	7082	0.0420	5.1	0.306	6.6	0.0529	4.2	0.77	265	13	271	16	324	96	82	
a3	8453	780	32	0.35	8570	0.0403	4.3	0.290	4.9	0.0523	2.4	0.87	255	11	259	11	297	55	86	
a4	8087	173	14	-0.12	191	0.0669	4.6	1.24	13.4	0.1348	12.6	0.34	418	19	821	78	2161	219	19	
a5	6799	569	23	0.15	13062	0.0421	4.3	0.30	5.1	0.0518	2.7	0.85	266	11	266	12	275	62	97	
a6	7930	671	28	0.16	15132	0.0423	4.8	0.304	5.3	0.0522	2.3	0.90	267	12	270	13	293	53	91	
a7	4145	353	15	0.28	7930	0.0403	4.7	0.29	5.7	0.0519	3.2	0.82	255	12	258	13	282	74	90	
a8	4480	389	17	0.15	8946	0.0449	4.4	0.308	6.1	0.0497	4.2	0.72	283	12	272	15	182	98	156	
a9	5747	496	21	0.21	10989	0.0417	4.3	0.301	5.8	0.0523	3.8	0.74	264	11	267	14	297	88	89	
a10	5507	505	17	0.10	10512	0.0355	5.3	0.255	6.1	0.0521	2.9	0.88	225	12	231	13	291	66	77	
a11	7565	721	35	0.47	14572	0.0449	4.5	0.319	5.7	0.05157	3.4	0.80	283	13	281	14	266	78	106	
a12	4420	432	17	0.10	8525	0.0420	4.6	0.300	7.0	0.0518	5.2	0.66	265	12	267	17	278	120	95	
a13	1467	135	4	0.11	2794	0.0342	6.2	0.25	10.3	0.0524	8.2	0.60	217	13	224	21	301	188	72	
a14	4472	714	11	0.15	8247	0.0160	5.6	0.12	6.3	0.0542	2.7	0.90	102	6	115	7	377	61	27	
a15	6381	30	15	1.02	5604	0.3837	5.0	5.979	5.9	0.11302	3.2	0.84	2094	90	1973	53	1849	58	113	
a16	4843	28	10	0.76	4198	0.2970	4.7	4.708	5.9	0.11496	3.5	0.81	1676	70	1769	50	1879	62	89	
a17	8170	816	30	0.14	16012	0.0382	4.5	0.267	5.2	0.05070	2.8	0.85	242	11	240	11	227	64	106	
a18	2093	201	8	0.42	3816	0.0366	10.0	0.289	14.8	0.0574	10.9	0.68	232	23	258	34	507	240	46	
a19	4815	415	17	0.07	9191	0.0425	4.5	0.304	6.6	0.05185	4.8	0.69	268	12	269	16	279	110	96	
a20	6060	577	24	0.13	11938	0.0430	4.5	0.301	5.8	0.0507	3.6	0.78	272	12	267	14	226	84	120	
a21	10325	2190	48	0.08	1022	0.0206	4.8	0.186	6.7	0.06546	4.7	0.72	131	6	173	11	789	99	17	
a22	7455	705	27	0.13	14310	0.0397	4.7	0.28	5.9	0.0518	3.6	0.79	251	11	254	13	279	82	90	
a23	4253	392	18	0.21	8308	0.0462	5.1	0.32	6.4	0.0508	3.8	0.80	291	15	285	16	233	89	125	
a24	6940	665	30	0.10	13891	0.0471	4.3	0.322	5.1	0.04964	2.7	0.85	297	13	284	13	178	63	166	
a25	6318	611	25	0.14	11983	0.0419	4.8	0.303	5.6	0.0524	2.9	0.86	265	13	269	13	304	65	87	
a26	6146	621	22	0.14	5927	0.0365	4.6	0.274	5.5	0.0544	3.1	0.83	231	10	246	12	388	69	60	
a27	8975	919	37	0.11	16358	0.0420	5.2	0.32	6.4	0.0548	3.7	0.82	265	14	280	16	403	82	66	
a28	3789	368	17	0.22	7252	0.0465	4.5	0.334	5.9	0.0520	3.8	0.76	293	13	292	15	288	88	102	
a29	7166	719	30	0.18	13724	0.0426	4.6	0.30	5.4	0.0519	2.7	0.86	269	12	270	13	282	62	95	
a30	6369	656	26	0.15	12170	0.0413	4.9	0.30	5.7	0.0522	3.0	0.86	261	13	264	13	293	68	89	
a31	2458	233	10	0.14	4684	0.0437	4.9	0.31	7.0	0.0520	5.0	0.70	275	13	276	17	284	113	97	
a32	4938	523	22	0.15	9167	0.0435	4.7	0.32	5.4	0.0535	2.6	0.87	274	13	282	13	350	60	78	
a33	3566	370	19	0.52	6815	0.0452	4.7	0.32	6.3	0.0519	4.2	0.75	285	13	285	16	282	95	101	
a34	6642	690	28	0.11	12451	0.0419	4.4	0.31	6.1	0.0538	4.2	0.72	265	11	275	15	365	95	73	
a35	6999	676	30	0.14	13530	0.0454	4.4	0.32	4.9	0.0515	2.3	0.89	286	12	283	12	262	52	109	
a36	5180	527	23	0.11	9844	0.0463	4.5	0.34	5.7	0.0525	3.4	0.80	292	13	294	15	309	78	95	
a37	5974	627	26	0.20	11554	0.0424	4.4	0.30	5.1	0.0515	2.5	0.87	267	11	267	12	265	58	101	
a38	8576	814	35	0.15	16489	0.0448	4.5	0.32	5.3	0.0519	2.9	0.84	282	12	282	13	279	66	101	
a39	6430	584	27	0.21	12209	0.0465	4.5	0.34	5.5	0.0523	3.3	0.80	293	13	294	14	299	76	98	
a40	6593	556	24	0.13	12943	0.0458	4.3	0.32	5.1	0.0507	2.6	0.85	289	12	282	13	228	61	126	
a41	5599	447	19	0.17	10625	0.0429	4.3	0.31	5.2	0.0524	2.9	0.83	271	12	274	13	302	67	90	
a42	4535	357	15	0.11	8475	0.0446	4.3	0.33	5.3	0.0534	3.0	0.82	282	12	289	13	347	69	81	
a43	6465	469	21	0.13	12391	0.0464	4.3	0.33	5.2	0.0518	2.9	0.82	292	12	291	13	277	67	105	
a44	7969	605	25	0.21	14830	0.0417	4.4	0.31	5.2	0.0536	2.7	0.85	263	11	272	12	353	61	75	
a45	9595	652	26	0.13	18423	0.0420	4.4	0.30	4.9	0.0518	2.2	0.89	265	11	266	12	275	51	96	
a46	5577	348	15	0.17	10660	0.0452	4.4	0.32	5.5	0.0522	3.3	0.80	285	12	286	14	293	76	97	
a47	10856	668	29	0.16	20769	0.0455	4.3	0.33	4.6	0.0519	1.7	0.93	287	12	286	12	283	40	101	
a49	8017	439	19	0.16	15379	0.0456	4.3	0.33	4.9	0.0518	2.3	0.88	288	12	286	12	275	54	104	

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\ddagger}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc	
	(cps)	(ppm)	(ppm)	U		%		%		%		%		(Ma)		(Ma)		(Ma)		%
TS9a																				
a1	787	112	5	0.77	1581	0.0358	3.6	0.25	8.0	0.0501	7.1	0.45	227	8	224	16	200	165	114	
a2	1070	155	7	0.49	2202	0.0388	3.0	0.260	5.6	0.0487	4.7	0.54	245	7	235	12	132	111	186	
a3	984	114	6	0.46	1915	0.0466	3.0	0.329	6.3	0.0512	5.6	0.48	294	9	289	16	251	128	117	
a4	812	91	4	0.44	1559	0.0453	3.6	0.33	7.9	0.0527	7.0	0.46	285	10	289	20	316	159	90	
a5	5973	381	31	0.39	6173	0.0748	2.9	0.60	3.8	0.0579	2.5	0.76	465	13	475	15	524	54	89	
a6	1624	121	9	0.60	2963	0.0680	3.2	0.517	6.2	0.0551	5.3	0.52	424	13	423	22	416	119	102	
a7	20470	90	39	0.11	12934	0.4148	3.2	9.05	3.8	0.1582	2.0	0.84	2237	61	2343	36	2436	35	92	
a8	471	56	3	0.35	436	0.0428	4.2	0.309	8.7	0.0523	7.6	0.49	270	11	273	21	300	172	90	
a9	1018	119	5	0.36	1901	0.0432	3.7	0.321	6.6	0.0539	5.5	0.55	273	10	283	16	368	124	74	
a11	1207	44	6	0.51	1811	0.1234	3.3	1.137	6.5	0.06684	5.6	0.51	750	23	771	36	833	117	90	
a12	1650	128	10	0.54	3090	0.0698	3.1	0.512	4.9	0.0532	3.8	0.64	435	13	420	17	337	85	129	
a13	1539	118	8	0.32	2812	0.0690	3.2	0.52	5.3	0.0547	4.2	0.61	430	13	426	18	402	93	107	
a14	301	34	2	0.67	551	0.0495	3.3	0.38	8.6	0.0550	8.0	0.38	311	10	324	24	412	179	75	
a15	1943	150	11	0.42	3525	0.0706	3.1	0.536	4.3	0.05508	3.0	0.72	440	13	436	15	416	67	106	
a16	219	27	1	0.57	384	0.0395	4.7	0.313	10.6	0.05747	9.5	0.44	250	11	277	26	510	210	49	
a17	13252	581	54	0.58	2400	0.0942	3.0	0.933	3.9	0.07178	2.4	0.78	580	17	669	19	980	49	59	
a18	3142	248	20	0.64	5499	0.0710	3.1	0.562	5.1	0.0574	4.1	0.60	442	13	453	19	507	90	87	
a19	3110	28	9	0.52	2929	0.2958	3.4	4.330	5.0	0.10618	3.7	0.67	1670	50	1699	42	1735	68	96	
a20	6662	62	22	0.52	6214	0.3152	3.2	4.665	3.9	0.1073	2.3	0.80	1766	49	1761	33	1755	43	101	
a21	5638	525	27	0.61	4956	0.0417	3.6	0.342	4.5	0.05942	2.7	0.81	263	9	298	12	582	58	45	
a22	3997	364	27	0.42	7161	0.0681	3.1	0.53	4.4	0.0559	3.2	0.70	425	13	429	16	450	70	94	
a23	2414	192	15	0.55	4322	0.0678	3.1	0.52	4.9	0.0557	3.8	0.62	423	12	426	17	441	86	96	
a24	17929	202	50	0.06	16085	0.2538	3.0	3.898	3.9	0.11138	2.5	0.77	1458	39	1613	32	1822	45	80	
a25	2351	16	7	0.53	1796	0.3943	4.3	7.154	6.0	0.1316	4.2	0.72	2143	80	2131	55	2119	73	101	
a26	1305	102	8	0.69	2167	0.0613	3.2	0.508	5.4	0.0602	4.4	0.58	383	12	417	19	611	96	63	
a27	400	68	3	0.67	794	0.0385	4.2	0.27	8.0	0.0505	6.8	0.52	243	10	241	17	219	158	111	
a28	1028	125	6	0.57	1758	0.0436	3.6	0.352	5.3	0.0585	3.9	0.69	275	10	306	14	550	84	50	
a29	6876	746	30	0.24	1244	0.0385	3.5	0.36	4.5	0.0684	2.9	0.77	243	8	314	12	879	60	28	
a30	3498	322	26	0.72	6310	0.0645	3.9	0.49	5.5	0.0555	3.8	0.72	403	15	408	19	433	85	93	
a31	1189	105	8	0.36	2294	0.0707	3.1	0.50	5.5	0.0517	4.5	0.57	440	13	415	19	273	104	161	
a32	1399	136	10	0.66	2492	0.0626	3.3	0.48	5.1	0.0561	3.8	0.65	391	13	401	17	455	85	86	
a33	1442	129	11	0.68	2599	0.0709	3.7	0.54	6.3	0.0553	5.1	0.58	441	16	439	23	424	115	104	
a34	3505	176	10	0.98	117	0.0325	3.7	0.79	7.7	0.1754	6.7	0.48	206	8	589	35	2610	112	8	
a35	1678	167	7	0.41	476	0.0322	4.6	0.36	15.0	0.0803	14.3	0.31	204	9	309	41	1204	282	17	
a36	1130	103	7	0.36	2077	0.0673	3.5	0.51	6.0	0.0546	5.0	0.57	420	14	416	21	396	111	106	
a37	4688	122	10	0.60	79	0.0439	4.9	1.59	15.5	0.2629	14.8	0.31	277	13	968	102	3264	232	8	
a38	1814	266	13	0.55	3393	0.0414	3.2	0.31	4.8	0.0535	3.7	0.66	261	8	270	12	350	83	75	
a39	2504	177	13	0.36	3299	0.0697	3.7	0.56	5.8	0.0582	4.5	0.63	435	15	452	21	539	99	81	
a40	14300	647	76	0.33	3115	0.1146	4.1	1.16	4.5	0.0734	1.9	0.91	700	27	782	25	1026	38	68	
a41	2283	162	12	0.43	3995	0.0661	3.5	0.52	4.8	0.0573	3.3	0.73	413	14	427	17	503	72	82	
a42	53113	568	89	0.34	5450	0.1438	4.6	2.43	4.8	0.1226	1.3	0.96	866	38	1252	35	1995	23	43	
a43	6072	48	16	0.50	5732	0.2971	3.1	4.33	4.0	0.1058	2.4	0.79	1677	47	1700	33	1729	45	97	
a44	3306	271	9	0.16	1800	0.0329	4.3	0.26	6.9	0.0581	5.4	0.62	209	9	238	15	535	118	39	
a45	4407	234	16	0.44	7349	0.0645	3.3	0.53	5.4	0.0599	4.2	0.61	403	13	434	19	601	92	67	
a46	1439	77	5	0.14	2166	0.0729	3.5	0.53	5.3	0.0524	4.0	0.66	454	15	430	19	304	90	149	
a47	5020	437	15	0.36	750	0.0309	3.8	0.30	6.0	0.0709	4.7	0.63	196	7	268	14	953	96	21	
a48	1721	59	5	0.50	1175	0.0710	3.5	0.79	9.9	0.0805	9.3	0.35	442	15	590	45	1208	183	37	
a49	1803	90	6	0.33	2941	0.0655	5.5	0.55	7.9	0.0608	5.7	0.69	409	22	444	29	632	122	65	
a50	7943	192	26	0.66	12319	0.1138	3.0	1.01	3.7	0.0644	2.2	0.81	695	20	709	19	755	46	92	
a51	913	72	4	0.42	1793	0.0452	3.6	0.32	6.5	0.0510	5.5	0.55	285	10	280	16	240	126	119	
a52	1275	93	4	0.35	2435	0.0429	3.2	0.31	5.2	0.0524	4.1	0.61	271	8	274	13	304	94	89	
a53	440	30	2	0.90	813	0.0446	3.5	0.33	12.3	0.0542	11.8	0.28	281	10	292	32	380	266	74	
a54	6085	244	17	0.28	10859	0.0680	3.2	0.53	4.3	0.0560	3.0	0.73	424	13	429	15	453	66	94	
a55	5382	249	16	0.89	1122	0.0559	8.4	0.45	10.5	0.0580	6.3	0.80	351	29	375	33	528	138	66	
a56	934	55	3	0.60	1881	0.0502	3.6	0.34	6.4	0.0497	5.2	0.57	316	11	300	17	179	122	177	
a57	870	59	3	0.56	1723	0.0438	3.9	0.31	9.5	0.0505	8.6	0.41	277	10	271	23	219	200	126	
a58	1415	93	4	0.49	2776	0.0409	3.3	0.29	5.9	0.0506	4.9	0.55	259	8	255	13	223	114	116	
a59	1127	37	3	0.51	1984	0.0695	3.5	0.55	6.0	0.0570	4.8	0.58	433	15	442</					

b18	5288	712	22	0.55	1477	0.0275	3.6	0.259	5.8	0.0683	4.5	0.62	175	6	234	12	878	94	20
b19	624	85	4	0.69	1131	0.0419	2.6	0.317	6.4	0.05485	5.8	0.41	265	7	279	16	406	131	65
b20	185	29	1	0.92	326	0.0367	3.3	0.287	12.6	0.0567	12.2	0.26	233	8	256	29	478	269	49
b21	9213	958	55	0.44	1663	0.0525	3.7	0.418	6.1	0.05786	4.9	0.60	330	12	355	18	525	106	63
b22	7744	1001	47	0.50	3362	0.0444	3.1	0.35	4.1	0.0565	2.7	0.76	280	9	301	11	471	59	59
b23	761	113	6	0.78	1575	0.0441	3.2	0.29	6.7	0.0484	5.9	0.48	278	9	262	16	120	139	231
b24	3485	302	25	0.63	6276	0.0692	3.3	0.526	5.0	0.05519	3.7	0.67	431	14	429	18	420	83	103
b25	8439	906	42	0.32	3651	0.0477	4.3	0.392	5.5	0.0596	3.5	0.77	300	13	336	16	588	77	51
b26	3823	370	41	0.23	2709	0.1164	3.0	0.984	5.5	0.0613	4.6	0.54	710	20	695	28	649	98	109
b27	9964	993	57	0.36	9137	0.0528	3.6	0.42	4.6	0.0582	2.9	0.78	331	12	358	14	537	63	62
b28	3215	399	19	0.08	4247	0.0483	3.3	0.376	7.3	0.0565	6.5	0.46	304	10	324	20	471	144	65
b29	2826	492	17	0.14	5363	0.0360	3.9	0.26	6.1	0.0526	4.6	0.65	228	9	235	13	310	105	73
b30	1231	178	9	0.45	2330	0.0456	2.8	0.33	4.7	0.0525	3.8	0.60	287	8	289	12	306	86	94
b31	24888	483	91	0.30	7627	0.1734	2.3	2.11	2.7	0.0884	1.4	0.86	1031	22	1153	19	1391	26	74
b32	16735	446	116	0.49	6613	0.2455	3.2	2.99	4.1	0.0883	2.5	0.78	1415	41	1405	32	1390	49	102
b33	883	139	6	0.79	1715	0.0357	3.3	0.25	8.4	0.0510	7.8	0.39	226	7	228	17	241	179	94
b34	1469	235	12	0.64	2939	0.0440	3.4	0.302	5.5	0.04982	4.3	0.61	277	9	268	13	187	101	149
b35	4059	42	14	0.84	3337	0.2495	3.0	4.15	4.9	0.1207	3.9	0.61	1436	39	1664	41	1966	70	73
b36	2371	198	12	0.36	1217	0.0530	3.5	0.450	7.7	0.0615	6.9	0.45	333	11	377	25	658	148	51
b37	1004	175	8	0.95	1902	0.0344	3.1	0.25	5.9	0.0526	5.0	0.52	218	7	226	12	309	114	70
b38	3834	383	12	0.39	2352	0.0265	3.6	0.229	6.0	0.0628	4.7	0.61	168	6	210	11	703	100	24
b39	2935	226	16	0.36	5260	0.0687	2.6	0.526	3.9	0.0555	2.9	0.67	428	11	429	14	431	64	99
b40	250	33	2	0.52	520	0.0470	3.6	0.313	11.1	0.0482	10.5	0.33	296	10	276	27	109	247	272
b41	7647	651	62	0.39	13954	0.0596	2.7	0.448	4.4	0.0545	3.5	0.60	373	10	376	14	393	79	95
b42	6829	442	35	0.31	11912	0.0773	2.6	0.610	4.5	0.0572	3.7	0.58	480	12	483	18	499	82	96
b43	67681	235	110	0.20	42021	0.4322	2.6	9.552	2.9	0.1603	1.2	0.90	2316	51	2393	27	2459	21	94
b44	1572	183	8	0.41	3138	0.0385	2.8	0.265	6.5	0.0499	5.8	0.44	244	7	239	14	190	135	128
b45	1459	159	7	0.45	2878	0.0407	2.8	0.283	5.4	0.0505	4.5	0.53	257	7	253	12	216	105	119
b46	8593	198	33	0.46	12679	0.1510	3.0	1.408	4.9	0.0676	3.8	0.61	907	25	892	29	856	80	106
b47	4081	207	15	0.44	7039	0.0683	2.6	0.545	5.2	0.0578	4.5	0.50	426	11	441	19	523	99	81
b48	672	59	3	0.63	1314	0.0432	3.1	0.303	6.8	0.0509	6.1	0.45	273	8	269	16	237	140	115
b49	2933	137	10	0.41	3260	0.0671	2.6	0.538	5.5	0.0581	4.8	0.47	419	10	437	20	534	106	78
b50	9660	193	23	0.19	7852	0.1160	2.6	1.063	3.1	0.0665	1.6	0.85	707	17	735	16	821	33	86
b51	946	72	4	0.69	1770	0.0439	4.4	0.323	9.8	0.0533	8.7	0.46	277	12	284	25	343	197	81
b52	6444	135	19	0.71	9812	0.1151	2.7	1.036	3.4	0.0652	2.1	0.79	702	18	722	18	782	43	90
b53	5127	253	15	0.34	5607	0.0567	2.8	0.474	3.8	0.0606	2.5	0.74	355	10	394	12	627	54	57
b54	751	58	3	0.77	1350	0.0380	3.4	0.293	7.5	0.0560	6.7	0.45	241	8	261	18	451	149	53
b55	1241	47	3	0.32	2055	0.0671	2.9	0.556	5.4	0.0601	4.6	0.53	418	12	449	20	608	100	69
b56	2620	93	7	0.32	4610	0.0701	2.6	0.549	4.1	0.0569	3.1	0.64	436	11	445	15	487	69	90
b57	291	9	1	1.03	468	0.0658	3.9	0.563	10.9	0.0620	10.2	0.36	411	16	453	41	675	217	61
b58	153	6	0	0.57	227	0.0451	5.0	0.420	13.3	0.0677	12.4	0.37	284	14	356	41	859	257	33
b59	7354	264	17	0.14	2460	0.0650	2.5	0.581	3.6	0.0648	2.5	0.71	406	10	465	13	768	54	53
b60	17252	210	32	0.10	10547	0.1567	2.3	1.492	2.7	0.0690	1.4	0.86	938	20	927	17	900	29	104

TABLE DR 4 (CONTINUED). U/Pb GEOCHRONOLOGY

Number	^{207}Pb	U	Pb^+	Th^\dagger	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\frac{^{206}\text{Pb}^\ddagger}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}^\ddagger}{^{206}\text{Pb}}$	2 σ	$\rho\text{ho}^\#$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{235}\text{U}}$	2 σ	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	2 σ	conc
	(cps)	(ppm)	(ppm)	U		%	%		%		%		(Ma)	(Ma)		(Ma)			%
0818H1																			
a1	874	34	4	0.66	1456	0.0945	3.1	0.78	6.2	0.0602	5.3	0.50	582	17	588	28	611	115	95
a2	679	9	2	1.11	675	0.1782	4.6	2.474	9.2	0.1007	8.0	0.50	1057	45	1264	69	1637	148	65
a3	26371	56	36	0.41	12502	0.5390	3.2	15.769	3.6	0.2122	1.7	0.88	2779	73	2863	35	2922	27	95
a4	1674	138	7	0.06	3060	0.0530	2.6	0.40	3.9	0.0549	2.9	0.67	333	8	342	11	406	65	82
a5	851	30	3	0.52	1327	0.0981	3.0	0.88	5.5	0.0648	4.5	0.55	603	17	639	26	767	96	79
a6	2991	104	11	0.09	4851	0.1087	2.9	0.926	4.0	0.0618	2.8	0.73	665	19	666	20	666	59	100
a7	770	20	3	0.36	1209	0.1426	3.5	1.26	7.9	0.0643	7.1	0.45	859	29	830	46	752	150	114
a8	1902	37	7	0.43	2707	0.1644	3.1	1.580	4.9	0.0697	3.8	0.63	981	28	962	31	920	78	107
a10	2478	103	9	0.04	4126	0.0943	2.8	0.788	4.8	0.0606	3.9	0.58	581	15	590	22	624	84	93
a11	1109	114	5	0.26	2067	0.0457	2.9	0.340	6.3	0.05390	5.6	0.45	288	8	297	16	367	127	79
a12	955	123	6	0.75	1781	0.0377	3.0	0.281	6.1	0.0540	5.3	0.49	239	7	251	14	373	120	64
a13	920	101	5	0.16	1922	0.0466	3.1	0.31	5.8	0.0482	4.9	0.53	294	9	274	14	111	116	266
a14	1233	26	6	1.00	1709	0.1653	3.1	1.65	5.4	0.0726	4.4	0.58	986	29	991	35	1003	88	98
a15	10696	75	29	0.58	9393	0.3256	3.0	5.147	3.7	0.11464	2.2	0.80	1817	47	1844	32	1874	40	97
a16	7435	348	14	0.26	142	0.0299	3.3	0.638	7.7	0.15458	7.0	0.43	190	6	501	31	2397	119	8
a17	1039	106	4	0.13	1866	0.0427	3.7	0.319	6.3	0.05419	5.1	0.59	269	10	281	16	379	114	71
a18	3831	333	18	0.25	7022	0.0529	2.9	0.399	4.1	0.0548	3.0	0.70	332	9	341	12	403	66	82
a19	16913	490	32	0.34	134	0.0440	3.0	1.083	3.8	0.17840	2.3	0.79	278	8	745	20	2638	38	11
a20	4469	386	17	0.12	1171	0.0436	2.7	0.405	3.9	0.0673	2.8	0.70	275	7	345	11	849	58	32
a21	4436	251	18	0.28	1407	0.0681	2.7	0.554	5.9	0.05901	5.2	0.46	425	11	448	21	567	113	75
a22	3048	201	15	0.25	5378	0.0717	2.8	0.56	4.0	0.0569	2.9	0.70	447	12	453	15	487	64	92
a23	2237	29	8	0.32	2621	0.2456	3.0	2.90	4.6	0.0856	3.5	0.66	1416	38	1382	35	1329	67	107
a24	13813	84	31	0.18	11268	0.3588	2.7	6.088	3.2	0.12306	1.7	0.84	1976	46	1989	28	2001	30	99
a25	29109	154	63	0.29	22139	0.3742	2.7	6.806	3.0	0.1319	1.4	0.89	2049	47	2086	27	2123	24	97
a26	4132	235	15	0.24	703	0.0588	3.0	0.601	6.7	0.0742	6.0	0.45	368	11	478	26	1047	122	35
a27	931	103	4	0.15	1711	0.0436	3.2	0.33	6.8	0.0544	6.0	0.47	275	9	287	17	387	135	71
a28	2716	112	12	0.15	4333	0.1097	2.8	0.952	4.5	0.0629	3.5	0.62	671	18	679	22	705	74	95
a29	2180	87	10	0.40	3408	0.1104	3.4	0.98	4.7	0.0643	3.2	0.73	675	22	693	24	751	68	90
a30	1242	123	6	0.19	1800	0.0495	3.4	0.39	8.2	0.0572	7.4	0.42	311	10	335	24	500	163	62
a31	2747	87	11	0.26	4150	0.1263	3.8	1.15	5.5	0.0662	4.0	0.68	767	27	779	30	814	84	94
a32	1178	26	5	0.46	1590	0.1685	3.5	1.73	6.7	0.0746	5.7	0.52	1004	32	1021	44	1059	115	95
a33	637	73	3	0.18	1185	0.0474	3.7	0.35	8.2	0.0534	7.3	0.45	299	11	304	22	345	165	87
a34	983	118	5	0.16	1263	0.0470	3.0	0.37	7.5	0.0566	6.9	0.40	296	9	317	21	475	153	62
a35	740	93	5	0.49	1426	0.0457	3.2	0.33	7.1	0.0521	6.3	0.45	288	9	288	18	290	145	99
a36	1051	62	6	0.44	1838	0.0922	3.6	0.73	5.7	0.0577	4.4	0.63	569	19	558	25	517	96	110
a37	16048	44	28	0.57	8141	0.5027	2.8	13.71	3.3	0.1978	1.6	0.86	2625	61	2730	31	2808	27	93
a38	480	18	2	0.35	785	0.1130	4.1	0.95	8.8	0.0609	7.8	0.47	690	27	678	45	637	168	108
a39	46321	134	74	0.24	11993	0.4983	2.8	12.22	3.0	0.1779	1.0	0.94	2607	60	2622	28	2634	16	99
a40	1453	35	6	0.47	2178	0.1459	3.3	1.35	5.3	0.0669	4.1	0.62	878	27	866	31	835	86	105
a41	1569	128	6	0.19	3033	0.0466	4.8	0.33	6.8	0.0520	4.9	0.70	294	14	293	17	285	112	103
a42	30441	164	53	0.15	3918	0.3048	2.9	6.16	3.4	0.1465	1.7	0.86	1715	44	1998	30	2305	29	74
a43	9412	306	30	0.02	15262	0.1055	2.8	0.90	3.5	0.0620	2.0	0.82	647	17	653	17	672	42	96
a44	2689	99	9	0.24	3050	0.0891	3.0	0.75	4.9	0.0611	3.9	0.61	550	16	569	22	643	84	86
a45	7696	33	16	0.97	6191	0.3648	2.7	6.28	3.4	0.1249	2.0	0.80	2005	47	2016	30	2027	36	99
a46	2667	39	9	0.79	3375	0.1851	3.8	2.03	7.0	0.0795	5.9	0.54	1095	38	1125	49	1185	116	92
a47	2321	56	7	0.26	3691	0.1186	2.9	1.03	4.4	0.0630	3.3	0.65	722	20	719	23	708	71	102
a48	1338	95	4	0.26	2553	0.0464	3.0	0.34	5.4	0.0524	4.5	0.55	292	8	294	14	302	103	97
a49	238	6	1	0.57	435	0.1183	3.3	0.89	11.6	0.0547	11.1	0.28	721	23	647	57	399	249	181
a50	2203	51	5	0.16	3502	0.1029	2.8	0.90	5.0	0.0635	4.1	0.56	632	17	652	24	724	87	87
a51	183	3	0	0.66	279	0.1250	4.7	1.13	14.3	0.0655	13.5	0.33	759	34	768	80	792	283	96
a52	11218	252	15	0.50	122	0.0396	3.3	0.97	5.9	0.1773	4.9	0.56	251	8	688	30	2628	81	10
a53	1546	86	4	0.32	2190	0.0445	2.8	0.34	6.8	0.0555	6.2	0.42	281	8	297	18	431	138	65
a54	6542	26	7	0.28	893	0.2460	3.5	4.59	5.4	0.1352	4.1	0.66	1418	45	1747	46	2167	71	65
a55	802	11	2	0.58	1092	0.1237	7.5	1.30	10.8	0.0760	7.8	0.70	752	54	844	64	1094	155	69
a56	2282	50	6	0.68	1386	0.0947	3.4	0.84	6.8	0.0640	5.9	0.50	583	19	617	32	743	125	79
a57	120	2	0	0.82	210	0.1200	5.5	0.97	14.7	0.0584	13.6	0.38	731	38	687	76	547	296	134
a58	863	40	2	0.17	1649	0.0495	3.1	0.36	7.0	0.0529	6.2	0.45	311	10	313	19	325	141	96
a59	3276	59	7	0.60	1644	0.1014	2.7	0.97	3.9	0.0692</td									

b17	116	5	1	0.78	228	0.1008	5.3	0.688	15.2	0.04952	14.2	0.35	619	32	532	65	173	331	359
b18	999	41	4	0.41	1601	0.0999	3.8	0.867	5.9	0.0630	4.5	0.64	614	22	634	28	708	96	87
b19	265	10	1	0.92	402	0.1047	3.6	0.970	14.8	0.06726	14.4	0.25	642	22	689	77	846	299	76
b20	1553	72	8	0.63	2617	0.0932	3.8	0.774	5.6	0.0602	4.2	0.67	575	21	582	25	612	91	94
b21	3174	66	13	0.47	4197	0.1828	3.4	1.910	4.7	0.07580	3.3	0.72	1082	34	1085	32	1090	65	99
b22	1380	144	7	0.26	2597	0.0471	3.2	0.35	5.5	0.0536	4.5	0.58	297	9	303	15	355	102	84
b23	1843	78	5	0.16	451	0.0560	7.1	0.66	9.0	0.0858	5.5	0.79	351	24	516	37	1333	107	26
b24	647	75	3	0.16	1238	0.0468	3.3	0.339	7.6	0.05258	6.9	0.43	295	9	297	20	311	157	95
b25	1629	65	7	0.21	2549	0.1062	3.0	0.944	5.4	0.0645	4.5	0.56	651	19	675	27	757	95	86
b26	736	33	4	0.80	1218	0.1021	2.9	0.868	8.1	0.0616	7.6	0.36	627	18	634	39	661	162	95
b27	1149	47	5	0.31	1779	0.1013	3.5	0.91	6.1	0.0652	4.9	0.58	622	21	657	30	781	104	80
b28	19293	66	39	0.65	11216	0.4695	2.8	11.228	3.2	0.1734	1.4	0.89	2482	59	2542	30	2591	24	96
b29	2036	190	10	0.24	836	0.0512	3.1	0.43	5.4	0.0614	4.4	0.57	322	10	366	17	652	95	49
b30	504	21	3	0.48	838	0.1145	2.8	0.95	7.1	0.0604	6.6	0.39	699	18	680	36	620	142	113
b31	7840	281	26	0.13	730	0.0878	3.1	1.04	4.2	0.0862	2.8	0.74	543	16	726	22	1344	54	40
b32	2483	281	13	0.15	769	0.0444	3.5	0.40	7.5	0.0651	6.7	0.46	280	10	341	22	776	141	36
b33	5090	267	22	0.46	1021	0.0713	3.4	0.76	4.9	0.0778	3.4	0.71	444	15	577	22	1142	68	39
b34	4658	229	21	0.01	7546	0.0995	2.7	0.85	4.2	0.0622	3.2	0.65	611	16	626	20	681	68	90
b35	891	41	5	0.51	1435	0.1040	3.7	0.90	6.5	0.0630	5.4	0.57	638	23	653	32	708	114	90
b36	694	85	5	0.19	1349	0.0594	2.9	0.43	8.8	0.0519	8.3	0.32	372	10	360	27	283	191	131
b37	454	62	3	0.75	457	0.0366	3.7	0.27	9.0	0.0533	8.2	0.41	232	8	242	19	341	185	68
b38	8244	354	26	0.27	313	0.0624	3.2	0.90	6.0	0.1051	5.0	0.54	390	12	654	29	1715	93	23
b39	1232	137	6	0.14	2412	0.0417	3.0	0.30	5.5	0.0518	4.6	0.55	263	8	264	13	276	105	95
b40	406	11	2	0.79	664	0.1389	3.9	1.19	8.7	0.0621	7.7	0.45	839	31	796	49	679	166	123
b41	1138	116	5	0.25	2264	0.0435	3.0	0.31	7.5	0.0511	6.9	0.40	275	8	271	18	243	159	113
b42	664	28	3	1.30	1130	0.0863	3.2	0.69	7.5	0.0582	6.8	0.42	534	16	534	32	536	150	100
b43	18283	50	26	0.55	10614	0.4313	2.8	10.31	3.1	0.1734	1.3	0.90	2311	54	2463	29	2591	22	89
b44	933	76	4	0.17	1719	0.0474	3.6	0.36	6.7	0.0545	5.7	0.53	299	10	310	18	393	128	76
b45	1377	31	4	0.27	2071	0.1207	3.2	1.11	5.6	0.0669	4.6	0.57	735	22	760	30	836	95	88
b46	3625	60	10	0.45	4488	0.1449	3.3	1.49	4.5	0.0744	3.0	0.74	872	27	924	28	1051	60	83
b47	917	70	3	0.21	1803	0.0433	3.2	0.31	6.8	0.0512	5.9	0.48	273	9	271	16	251	137	109
b48	413	13	2	1.92	720	0.1013	4.0	0.82	9.3	0.0587	8.4	0.43	622	24	608	44	554	184	112
b49	1072	74	4	0.42	2014	0.0444	3.4	0.33	6.1	0.0533	5.0	0.56	280	9	286	15	340	114	82
b50	1192	30	3	0.55	1892	0.0939	3.5	0.82	7.1	0.0633	6.2	0.49	579	19	608	33	719	132	80
b51	20987	33	19	0.37	10640	0.4954	2.7	13.42	3.4	0.1965	2.0	0.81	2594	58	2710	32	2798	33	93
b52	2355	49	6	0.14	3408	0.1156	2.9	1.10	5.3	0.0689	4.4	0.55	705	19	753	28	897	91	79
b53	29511	41	31	0.56	1473	0.6195	3.2	15.48	3.8	0.1812	2.0	0.84	3108	79	2845	37	2664	34	117
b54	7734	97	15	0.19	10813	0.1501	3.0	1.49	3.7	0.0721	2.2	0.81	901	25	927	23	989	44	91
b55	2172	47	5	0.36	3442	0.1021	3.3	0.89	4.9	0.0634	3.6	0.67	627	20	648	24	721	76	87
b56	3517	75	8	0.30	5618	0.0963	2.9	0.84	4.0	0.0631	2.8	0.71	593	16	618	19	713	60	83
b57	4322	162	8	0.30	369	0.0422	3.0	0.53	5.6	0.0911	4.7	0.54	267	8	432	20	1449	90	18
b58	941	15	2	0.31	1430	0.1228	3.0	1.13	6.0	0.0666	5.2	0.50	747	22	767	33	825	109	90
b59	11666	31	12	0.26	9076	0.3571	3.0	6.38	3.4	0.1296	1.6	0.87	1969	50	2030	30	2092	29	94
b60	1095	34	2	0.33	1965	0.0644	3.1	0.50	6.0	0.0562	5.2	0.51	402	12	411	21	462	115	87

* Within-run background-corrected mean ^{207}Pb signal in counts per second.

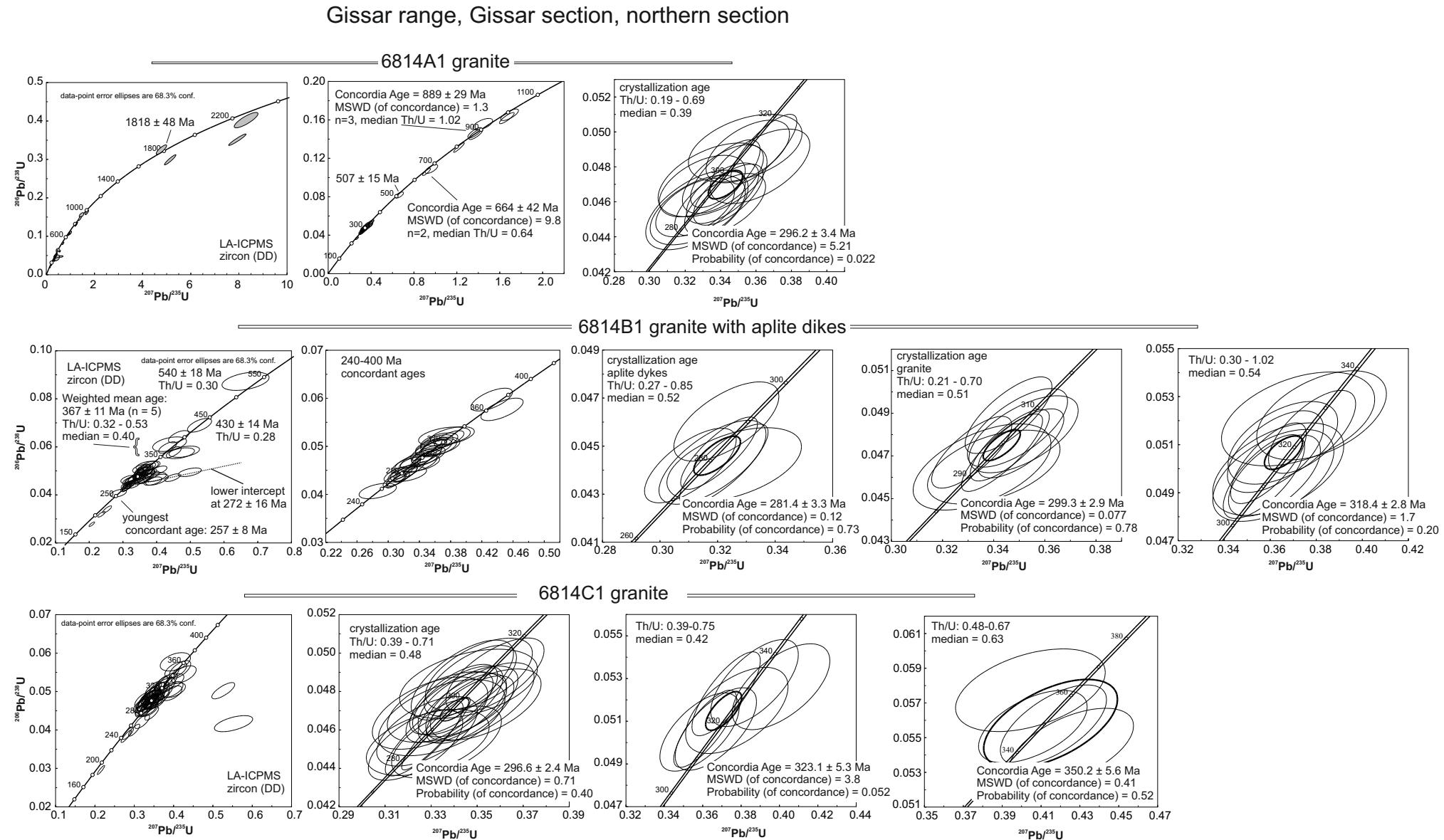
[†] U and Pb content and Th/U ratios were calculated relative to GJ-1 and are accurate to ~10%.

[§] Corrected for background, mass bias, laser induced U-Pb fractionation and common Pb (if detectable, see text on analytical method) using the Stacey and Kramers (1975) model Pb composition. $^{207}\text{Pb}/^{235}\text{U}$ calculated using $^{207}\text{Pb}/^{206}\text{Pb}/(^{238}\text{U}/^{206}\text{Pb} \times 1/137.88)$.

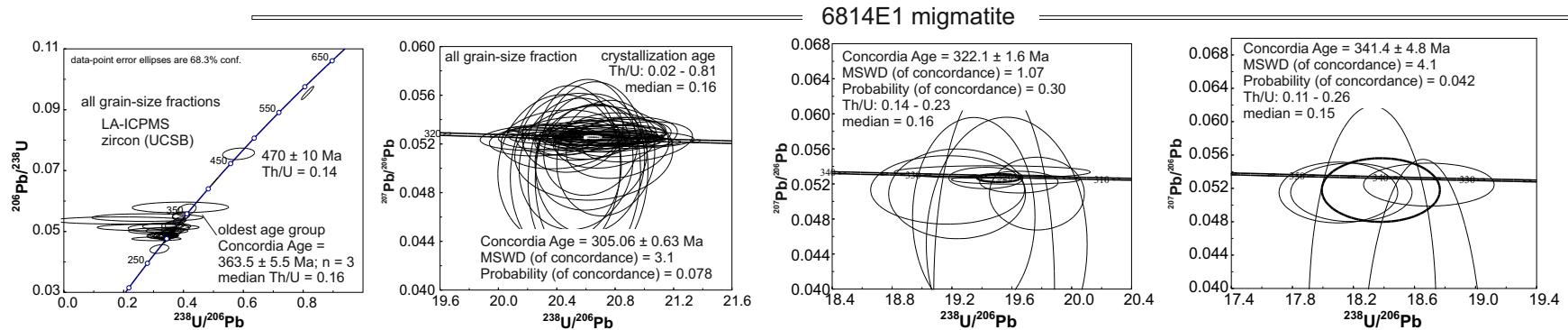
Errors are propagated by quadratic addition of within-run errors (1 standard error) and the reproducibility of GJ-1 (1 standard deviation).

Rho is the error correlation defined as $\text{err}^{206}\text{Pb}/^{238}\text{U}/\text{err}^{207}\text{Pb}/^{235}\text{U}$. See text for details.

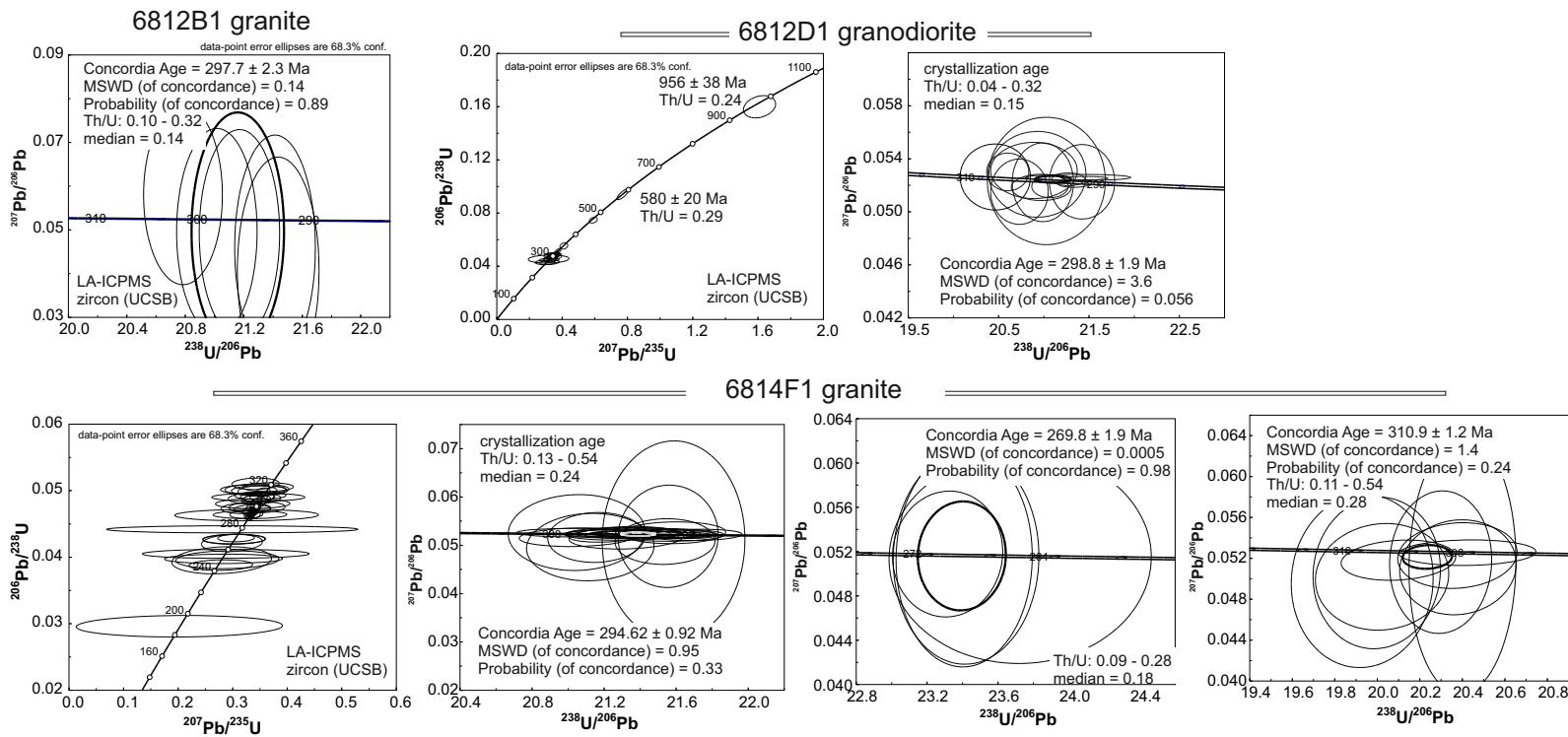
Figure DR2. New U-Pb zircon geochronology visualized in conventional Wetherill and Tera-Wasserburg concordia plots; detrital zircon data are also displayed in histograms. The analytical data are given in Table DR4 and a summary and interpretation of the age data is given in Table 1.



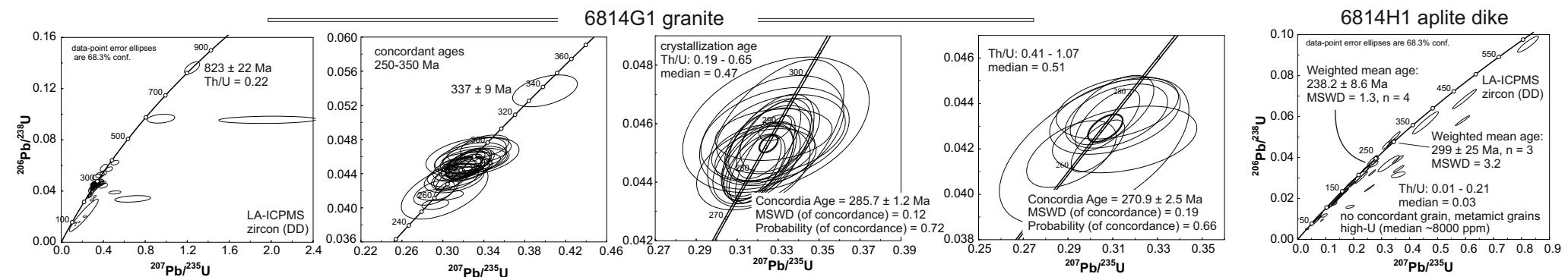
Gissar range, Gissar section, northern section, continuation



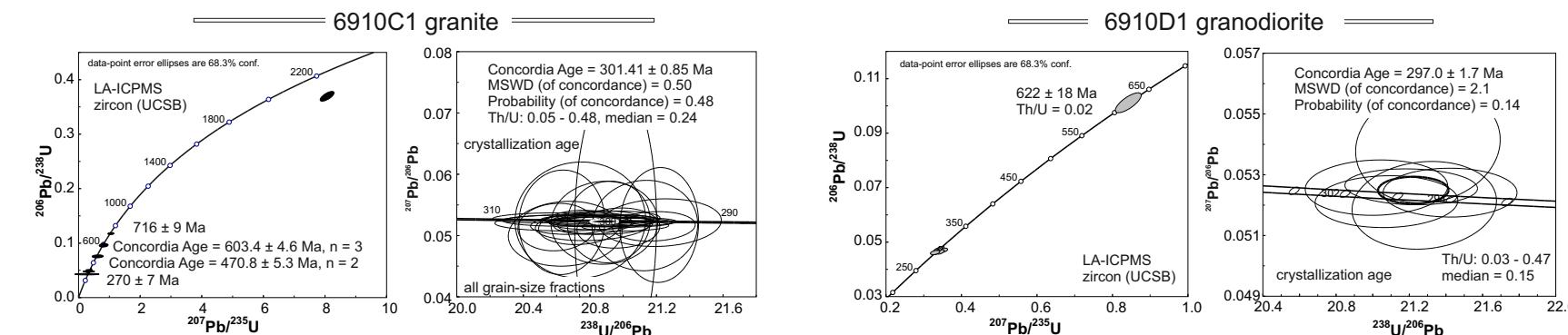
Gissar range, Gissar section, southern section



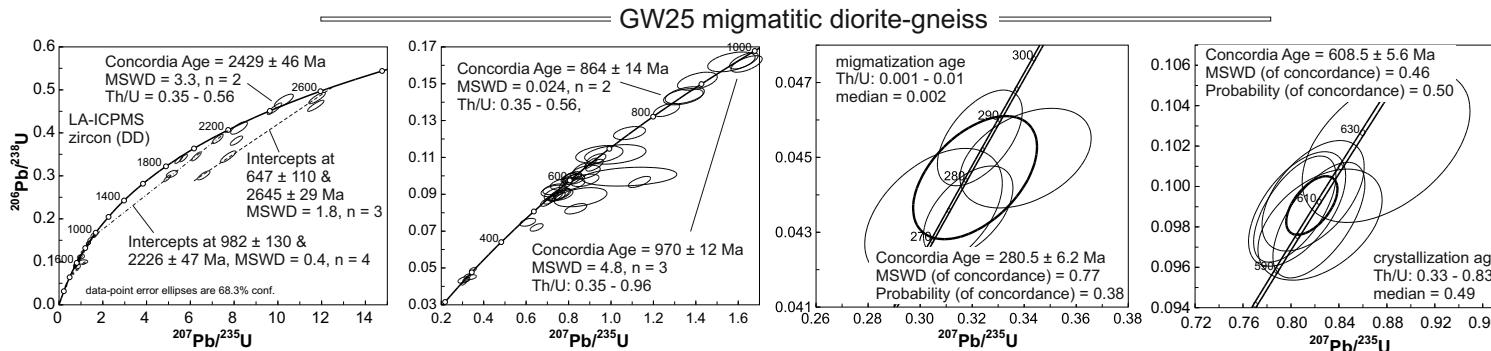
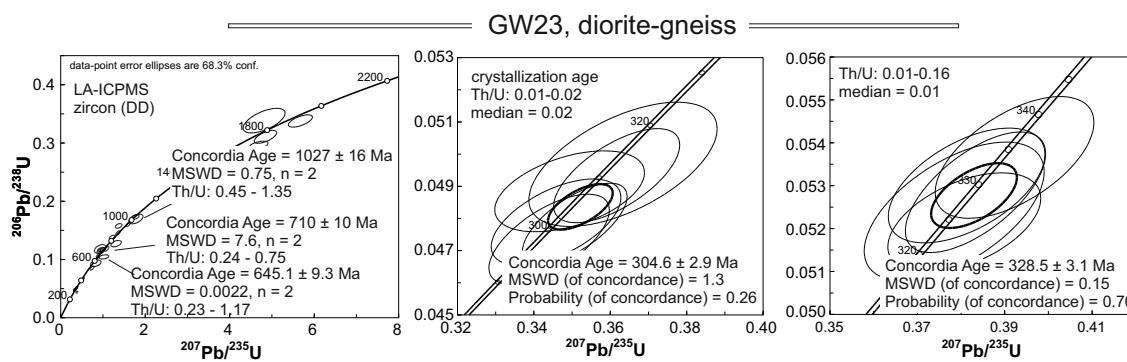
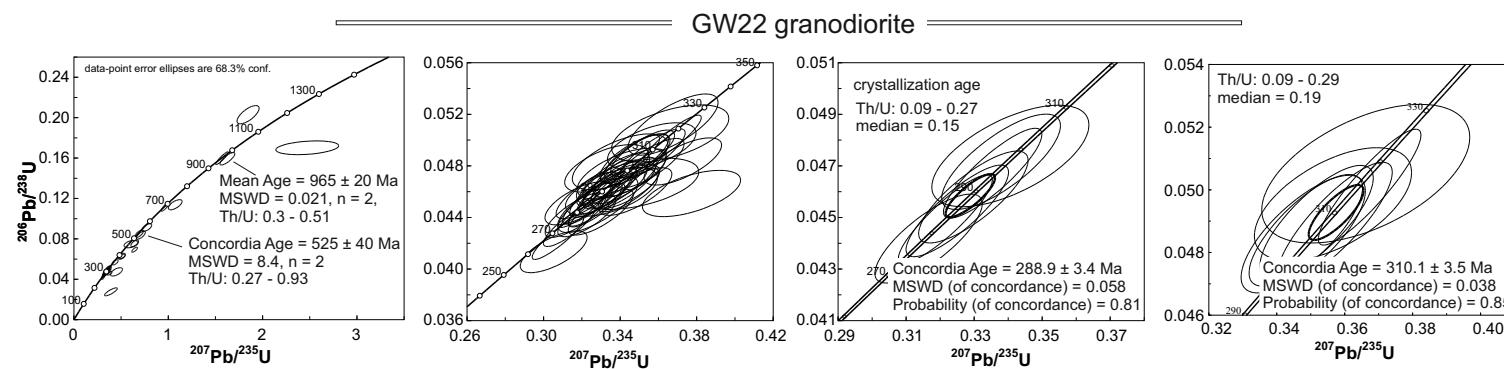
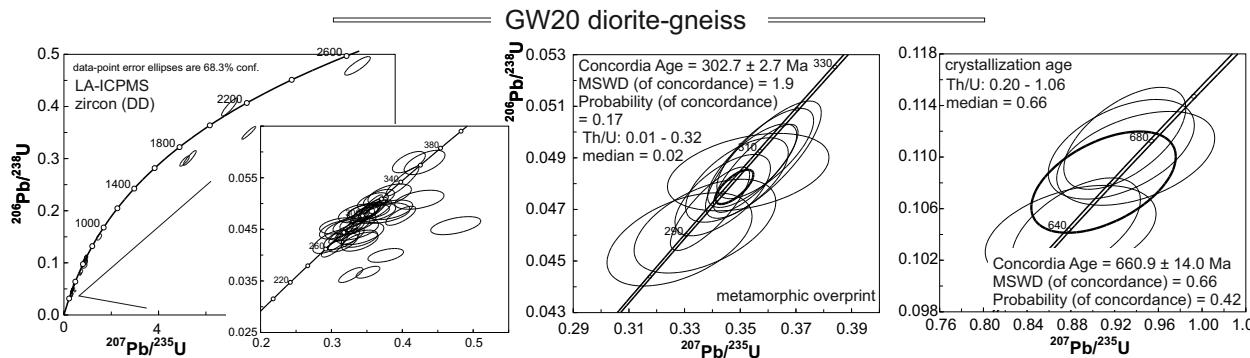
Gissar range, Gissar section, southern section, continuation



Gissar range, eastern part

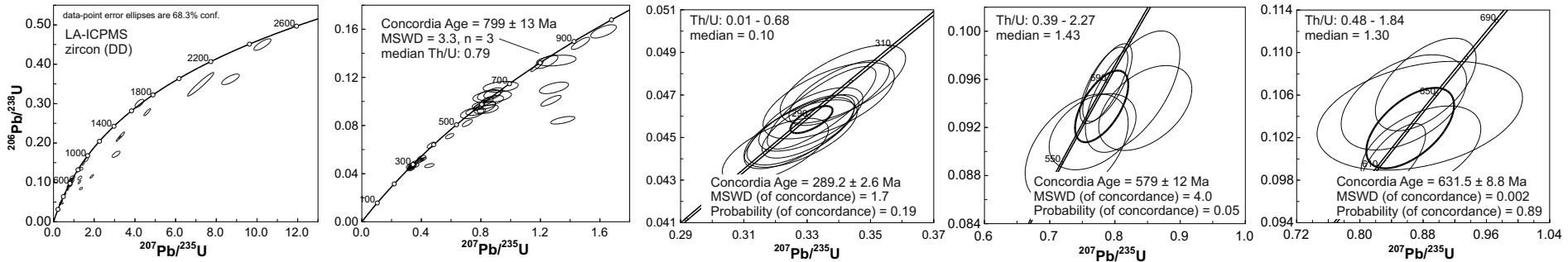


Garm massif

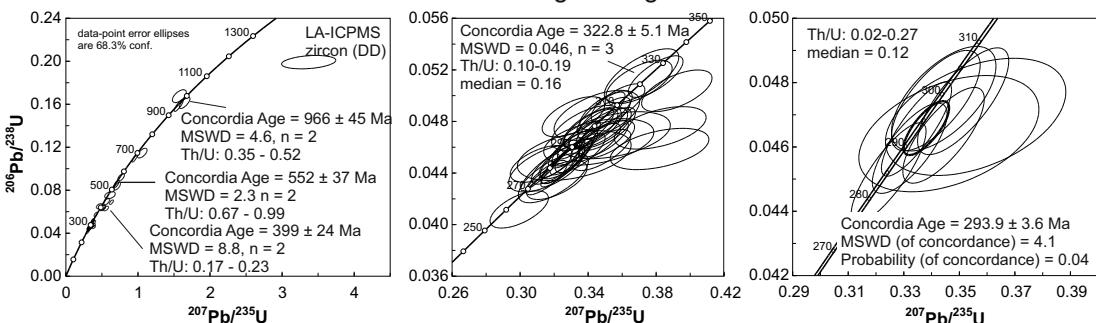


Garm massif, continuation

GW27 subvolcanic granitoid

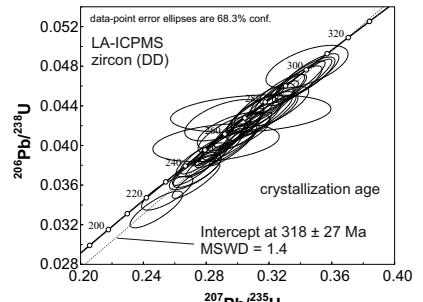
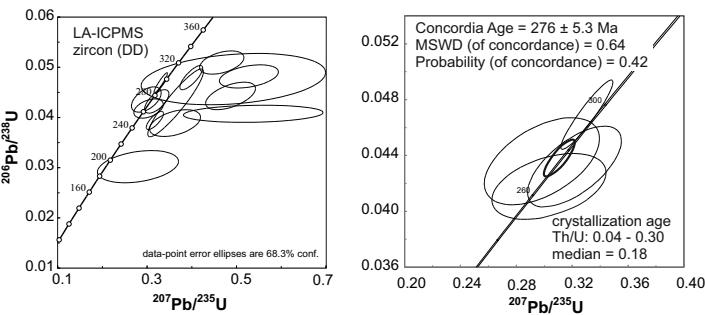


GW28 granite-gneiss

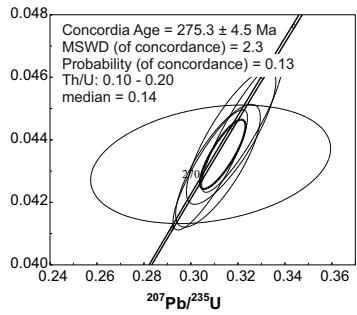


Alai range

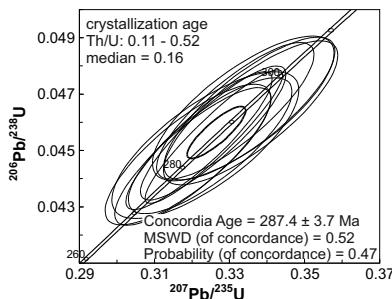
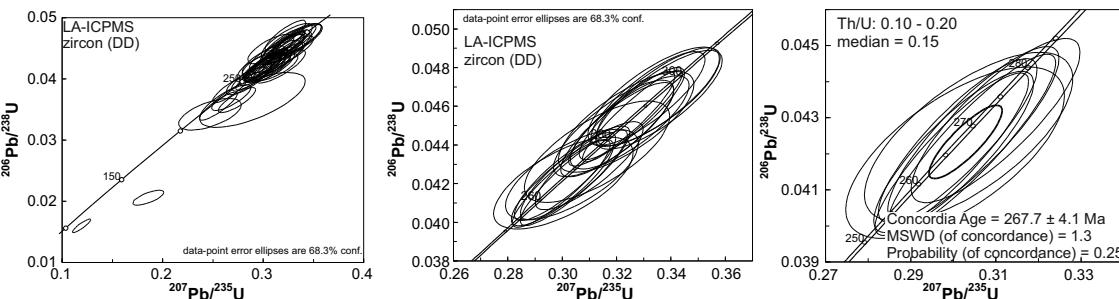
TS12a, granite



TS20a, diorite

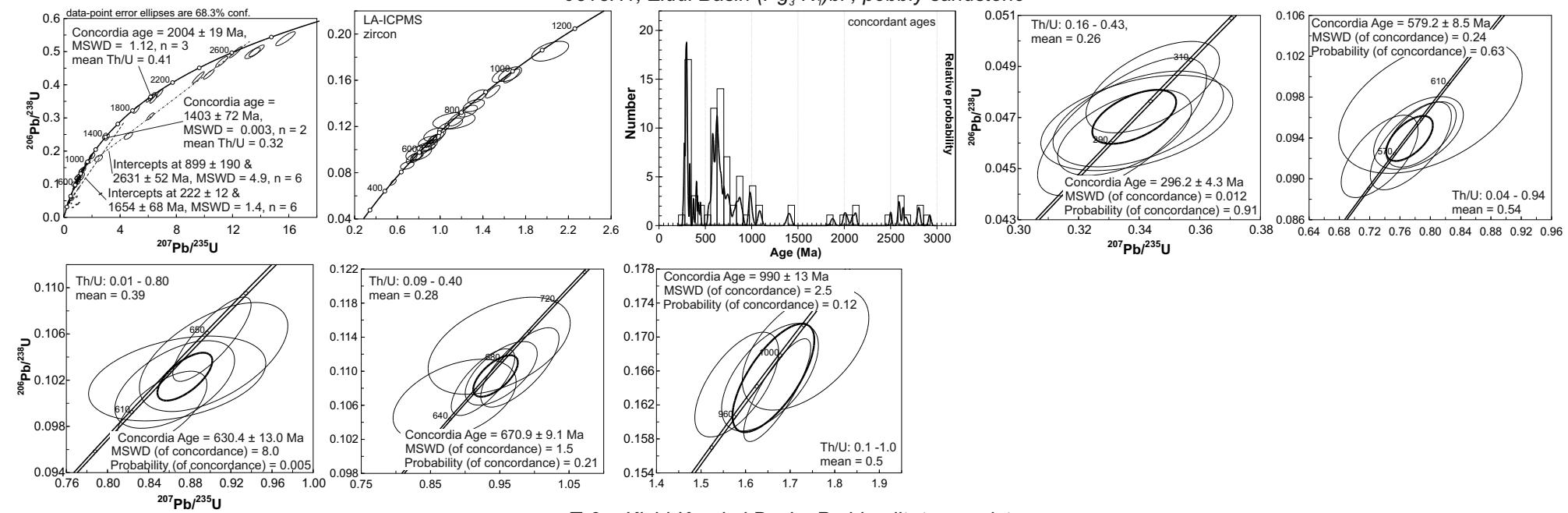


96TS2, granite

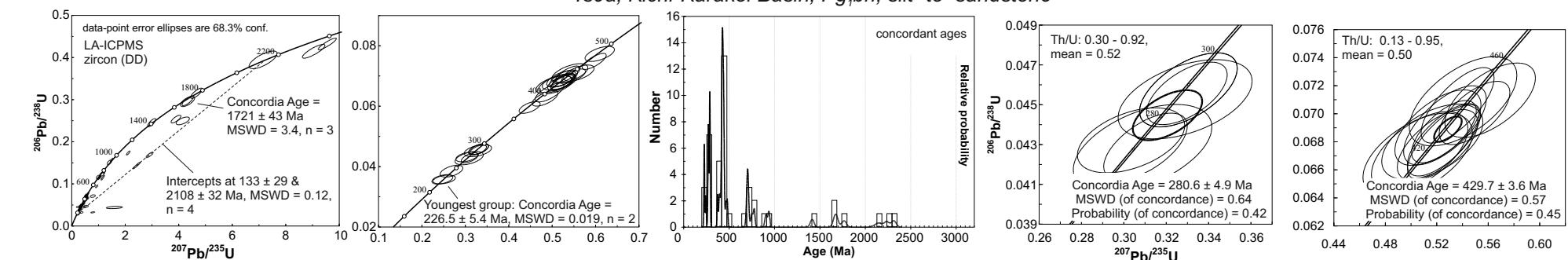


detrital U-Pb zircon data, intra-montane basins Tian Shan

0818H1, Ziddi Basin (Pg_3-N_1)_{bl}, pebbly sandstone



Ts9a, Kichi-Karakol Basin, Pg,bh, silt- to sandstone



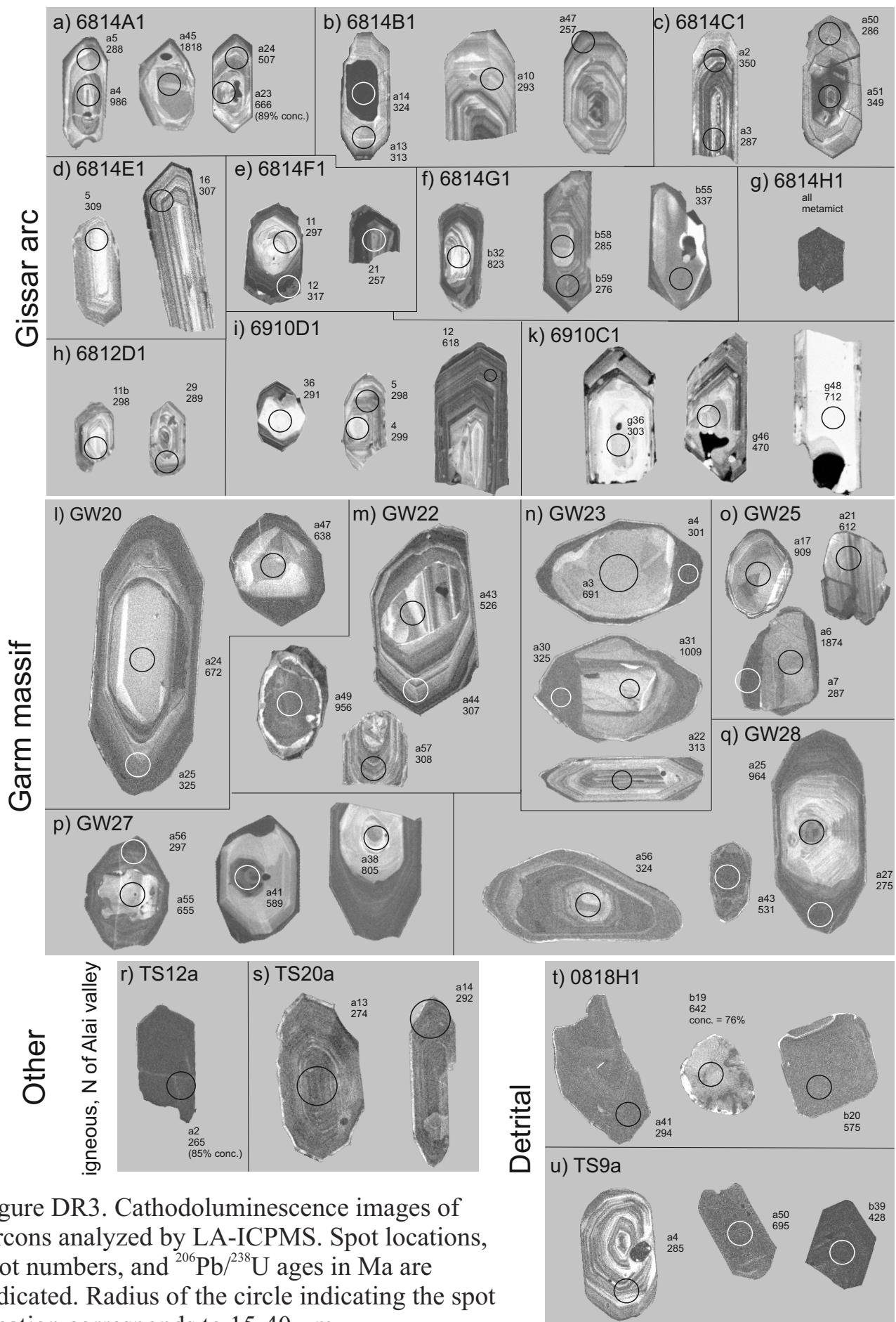
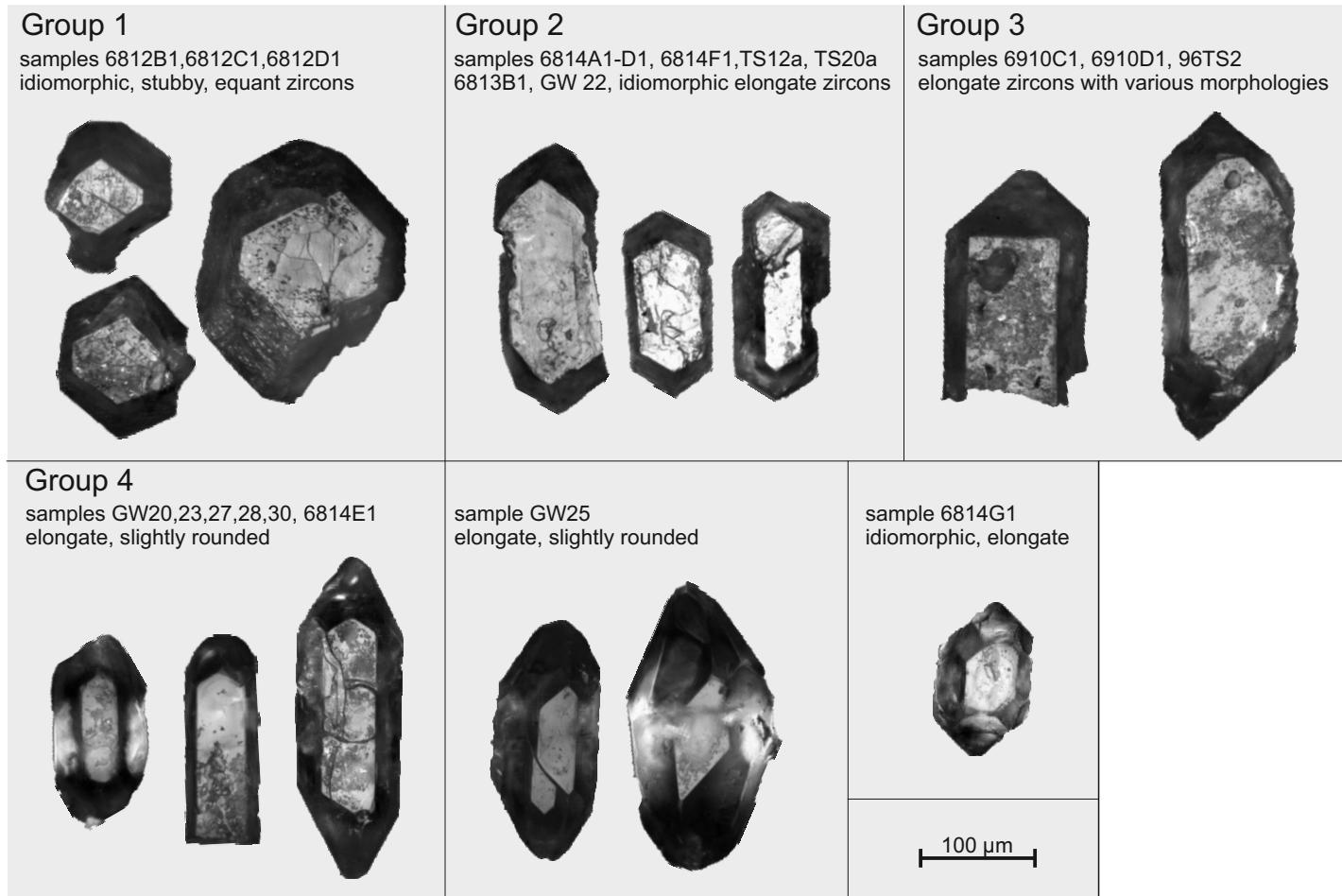


Figure DR3. Cathodoluminescence images of zircons analyzed by LA-ICPMS. Spot locations, spot numbers, and $^{206}\text{Pb}/^{238}\text{U}$ ages in Ma are indicated. Radius of the circle indicating the spot location corresponds to 15-40 μm .

Figure DR4. Igneous and metamorphic zircon morphologies



Detrital zircon morphologies

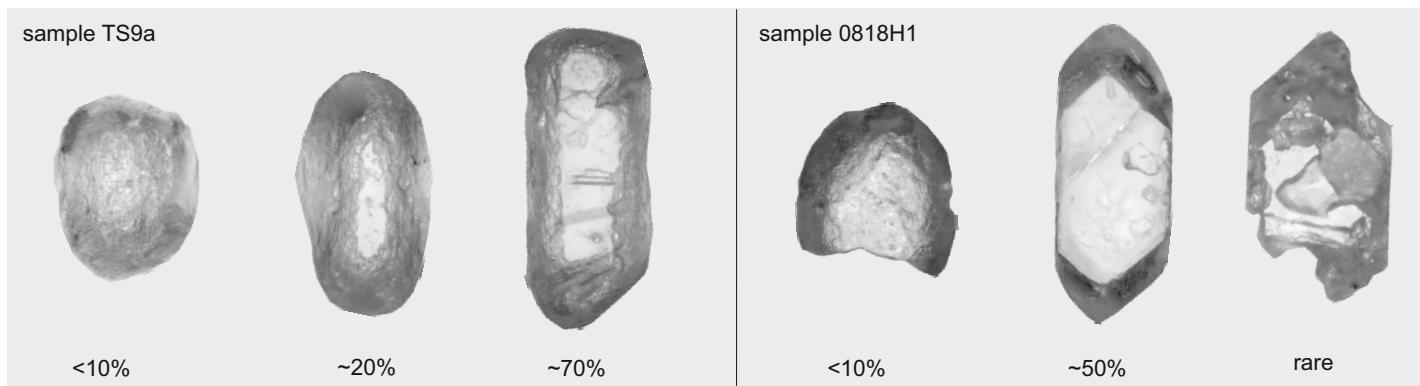


TABLE DR5. ZIRKON MORPHOLOGY

Sample	Color	Length [μm]	Shape	Morphology (Pupin)*	
				Index A	Index T
6812B1	yellow	50-150	idiomorphic/ equant	6-7	2-4
6812C1	milky white/ yellow	50-150	idiomorphic/ equant	6-7	2-4
6812D1	colorless/ light yellow	150-250	(hyp)idiomorphic/ equant	6-7	2-4
6813B1	colorless	100-250	idiomorphic/ elongate	6-7	2-3
6814A1	colorless	100-150	idiomorphic/ elongate	6-7	4-7
6814B1	colorless/ light pink	150-300	idiomorphic/ elongate	6-7	3-4
6814C1	colorless	150-250	idiomorphic/ elongate	6	3
6814D1	light pink/ light yellow	150-250	idiomorphic/ elongate	6	3
6814E1	light pink/ light yellow	100-250	idiomorphic/ elongate/ subrounded	6-7	3-5
6814F1	colorless/ light pink/ light yellow	100-150	idiomorphic/ elongate	7	3-4
6814G1	colorless	100-150	(hyp)idiomorphic/ elongate to equant	4-5	6-7
6910C1	colorless/ light yellow	150-300	idiomorphic/ elongate	5-7	6-7
6910D1	colorless	100-200	hypidiomorphic	5-7	6-7
TS12a	colorless/ light pink	100-150	idiomorphic	6-7	3-4
TS20a	light yellow	100-150	idiomorphic	6-7	3-4
96TS2	light pink	100-200	idiomorphic	5-7	4-7
GW20	colorless/ yellow	200-300	idiomorphic/ subrounded	7	3-4
GW22	pink	200-300	idiomorphic	8	4-5
GW23	colorless	150-250	idiomorphic/ subrounded	7	3-4
GW25	colorless	200-300	(hyp)idiomorphic/ slightly rounded	3-4	5
GW27	colorless	100-200	idiomorphic/ subrounded	6-7	3-4
GW28	colorless to yellow	200-300	idiomorphic/ subrounded	various	various
GW29	colorless	300-500	idiomorphic/ subrounded/ needle- shaped	7	3
GW30	light yellow	200-300	(hyp)idiomorphic/ subrounded	5-6	5
0818H1	colorless -pink	50-200	subrounded/ rounded	6-7	3-5
TS9a	light pink - pink	50-200	subrounded/ rounded	6-7	3-5

* Pupin, J. P., 1980, Zircon and granite petrology: Contributions to Mineralogy and Petrology, v. 73, p. 207-220.

TABLE DR6. AR-AR DATA

Sample:	6812C1	Irradiation:	FGA008P5H8 (End date: 2010-10-27 06:47:00.0)										
Project:	Pamir_Gissar Arc	Measurement Date:	19:00:0										
Owner:	Lothar_Kaessner	Device:	CO2-Laser										
Exp-Nr:	2593	Air:	2.96E+02										
Material:	3.28 mg Bt	J-Value:	1.81E-03										
		J-Value Error:	4.35E-06										
		f-value:	9.92E-01										
		f-value Err:	1.74E-04										
		Reference Standard(s):	FCT 28.305 ± 0.036 Ma										
2593: Blank corrected intensity intercepts		36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	8.62E-04	1.23E-04	6.47E-05	1.27E-04	1.72E-04	1.07E-04	2.40E-03	1.44E-04	2.68E-01	2.38E-04	2.0	2.16
2	Step 2.5%	1.60E-03	5.42E-05	2.26E-04	6.73E-05	4.96E-04	7.47E-05	7.62E-03	7.54E-05	5.41E-01	2.72E-04	10.1	7.11
3	Step 2.8%	1.26E-03	6.01E-05	3.86E-04	7.68E-05	6.41E-04	6.52E-05	1.18E-02	8.44E-05	5.01E-01	2.44E-04	23.3	9.77
4	Step 3.1%	1.44E-03	5.56E-05	4.68E-04	6.21E-05	6.74E-04	6.54E-05	1.61E-02	7.84E-05	6.13E-01	2.33E-04	28.4	10.74
5	Step 3.4%	1.67E-03	5.99E-05	4.31E-04	6.88E-05	9.53E-04	6.48E-05	2.10E-02	7.72E-05	7.76E-01	2.24E-04	34.6	12.68
6	Step 3.7%	2.48E-03	5.30E-05	6.15E-04	6.76E-05	1.21E-03	6.46E-05	2.50E-02	5.97E-05	1.25E+00	2.60E-04	39.7	19.70
7	Step 4.0%	2.54E-03	5.61E-05	6.03E-04	6.93E-05	1.31E-03	7.18E-05	2.92E-02	6.79E-05	1.60E+00	2.88E-04	51.7	28.11
8	Step 4.3%	3.00E-03	5.55E-05	6.79E-04	6.92E-05	1.39E-03	7.02E-05	2.68E-02	7.15E-05	2.09E+00	3.70E-04	56.2	43.54
9	Step 4.6%	2.96E-03	7.09E-05	5.05E-04	6.51E-05	1.27E-03	6.11E-05	2.27E-02	7.23E-05	2.15E+00	2.65E-04	58.1	54.65
10	Step 4.9%	2.74E-03	5.68E-05	5.51E-04	6.26E-05	1.27E-03	6.37E-05	2.30E-02	7.55E-05	2.70E+00	3.16E-04	69.1	80.53
11	Step 5.4%	1.56E-03	6.00E-05	2.55E-04	8.18E-05	8.21E-04	6.49E-05	1.94E-02	7.63E-05	2.51E+00	4.02E-04	81.0	103.73
12	Step 6.5%	1.02E-03	5.81E-05	3.65E-04	6.55E-05	6.37E-04	6.33E-05	1.65E-02	7.12E-05	1.81E+00	2.84E-04	82.8	90.16
13	Step 7.5%	1.16E-03	6.02E-05	3.46E-04	7.76E-05	8.90E-04	6.29E-05	2.81E-02	8.04E-05	2.99E+00	4.45E-04	88.2	93.04
14	Step 8.5%	1.10E-03	5.60E-05	3.29E-04	5.89E-05	8.76E-04	6.64E-05	3.26E-02	8.33E-05	3.81E+00	5.05E-04	91.2	105.52
15	Step 9.5%	9.52E-04	5.74E-05	2.20E-04	6.14E-05	8.36E-04	6.34E-05	2.84E-02	8.06E-05	3.83E+00	4.16E-04	92.4	123.69
16	Step 10.5%	9.42E-04	6.18E-05	5.07E-04	6.68E-05	8.77E-04	6.88E-05	3.12E-02	7.91E-05	4.40E+00	6.33E-04	93.5	130.72
17	Step 12.0%	1.08E-03	7.13E-05	2.06E-03	6.36E-05	9.47E-04	7.21E-05	3.70E-02	6.77E-05	5.02E+00	5.42E-04	93.5	125.83
18	Step 14.0%	7.17E-04	5.56E-05	4.17E-03	7.67E-05	5.96E-04	6.18E-05	2.00E-02	8.49E-05	2.68E+00	3.13E-04	92.0	122.12
19	Step 18.0%	2.28E-04	6.32E-05	1.58E-03	6.35E-05	3.64E-04	7.47E-05	1.20E-02	7.67E-05	1.31E+00	2.38E-04	94.8	103.27

Sample: 6812C1
Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Irradiation: FGA008P5H6 (End date: 2010-10-27 06:47:00.0)
Measurement Date: 37:58.0
Device: CO2-Laser
Air: 2.96E+02

Exp-Nr: 2587 J-Value: 1.81E-03 f-value: 9.92E-01 All Errors are 1s!
Material: 2.6 mg Ms J-Value Error: 4.35E-06 f-value Err: 1.74E-04 Fit model: quadratic
Reference Standard(s): FCT 28.305 ± 0.036 Ma

Corrected intensity intercepts		36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	1.32E-03	6.17E-05	2.82E-05	7.77E-05	3.04E-04	5.90E-05	7.55E-04	7.46E-05	5.61E-01	2.03E-04	28.2	207.70
2	Step 2.5%	5.03E-04	6.10E-05	2.70E-05	7.41E-05	1.35E-04	6.48E-05	1.45E-03	8.63E-05	3.40E-01	2.15E-04	54.9	127.96
3	Step 2.8%	1.88E-04	5.74E-05	0	6.84E-05	1.26E-04	5.41E-05	1.72E-03	7.51E-05	1.70E-01	2.28E-04	66.2	64.89
4	Step 3.1%	1.93E-04	6.68E-05	4.79E-05	6.94E-05	8.26E-05	6.20E-05	1.80E-03	6.58E-05	1.52E-01	1.97E-04	61.1	51.05
5	Step 3.4%	1.23E-04	6.65E-05	6.68E-06	7.55E-05	1.12E-04	6.07E-05	3.16E-03	7.07E-05	2.59E-01	2.05E-04	85.5	69.50
6	Step 3.7%	1.02E-04	6.45E-05	0	8.06E-05	6.87E-05	6.79E-05	2.54E-03	6.69E-05	2.06E-01	2.27E-04	84.9	68.27
7	Step 4.0%	7.64E-05	6.41E-05	2.96E-05	6.84E-05	1.64E-04	6.87E-05	1.85E-03	7.25E-05	1.41E-01	1.90E-04	83.5	63.39
8	Step 4.5%	1.59E-04	7.07E-05	7.92E-05	6.82E-05	9.54E-05	6.67E-05	3.01E-03	7.51E-05	2.28E-01	2.04E-04	78.8	59.21
9	Step 5.0%	3.25E-05	6.41E-05	1.26E-06	7.79E-05	2.30E-05	6.03E-05	1.78E-03	6.56E-05	1.22E-01	1.81E-04	91.9	62.53
10	Step 6.0%	7.11E-05	6.35E-05	4.32E-05	6.68E-05	1.45E-04	6.13E-05	3.15E-03	8.10E-05	2.32E-01	2.64E-04	90.7	66.24
11	Step 7.0%	8.64E-05	6.22E-05	0	7.03E-05	1.52E-04	6.69E-05	8.71E-03	7.64E-05	7.10E-01	2.06E-04	96.3	77.77
12	Step 8.0%	3.34E-04	5.56E-05	6.66E-05	6.67E-05	3.63E-04	6.10E-05	1.87E-02	8.05E-05	1.58E+00	2.36E-04	93.6	78.52
13	Step 9.0%	5.07E-04	6.24E-05	2.88E-05	7.31E-05	4.39E-04	7.17E-05	2.73E-02	8.02E-05	2.40E+00	3.22E-04	93.6	81.69
14	Step 10.0%	4.52E-04	6.83E-05	1.97E-06	7.21E-05	2.78E-04	6.89E-05	1.43E-02	7.39E-05	1.32E+00	2.11E-04	89.6	82.46
15	Step 11.0%	3.03E-04	6.90E-05	2.28E-06	7.42E-05	2.35E-04	6.05E-05	1.24E-02	7.58E-05	1.12E+00	2.32E-04	91.8	82.32
16	Step 12.0%	2.41E-04	6.70E-05	0	7.56E-05	1.75E-04	6.43E-05	7.76E-03	7.97E-05	7.00E-01	2.15E-04	89.5	79.98
17	Step 14.0%	4.81E-04	6.39E-05	0	6.65E-05	3.08E-04	7.08E-05	1.42E-02	7.57E-05	1.44E+00	2.57E-04	89.8	89.90
18	Step 18.0%	7.48E-04	6.15E-05	0	7.42E-05	3.40E-04	5.84E-05	1.44E-02	6.96E-05	1.52E+00	2.42E-04	85.0	89.47
19	Step 25.0%	8.29E-04	6.32E-05	0	8.17E-05	4.42E-04	6.94E-05	1.43E-02	8.15E-05	1.60E+00	2.85E-04	84.2	93.65

Sample: 6813B1

Project: Pamir_Gissar Arc

Owner: Lothar_Kaessner

Exp-Nr: 2607

Material: 2.08 mg Bt

Irradiation: FGA008P5H10 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 24:40.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.91E-01

J-Value Error: 4.35E-06 f-value Err: 1.43E-04

All Errors are 1s!

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2607: Blank corrected intensity intercepts		36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	4.78E-04	5.85E-05	1.89E-04	6.21E-05	2.60E-04	6.02E-05	3.75E-03	7.18E-05	2.13E-01	2.12E-04	31.5	17.77
2	Step 2.5%	4.13E-04	5.72E-05	1.42E-04	6.68E-05	2.89E-04	6.01E-05	6.97E-03	6.40E-05	3.15E-01	2.40E-04	60.0	26.88
3	Step 2.8%	3.15E-04	4.96E-05	1.69E-04	6.53E-05	2.11E-04	6.25E-05	8.86E-03	6.53E-05	4.22E-01	2.72E-04	77.1	36.40
4	Step 3.1%	3.00E-04	5.34E-05	8.34E-05	6.23E-05	2.47E-04	5.95E-05	1.04E-02	7.65E-05	6.09E-01	2.73E-04	85.0	49.36
5	Step 3.4%	3.69E-04	5.22E-05	1.27E-04	6.81E-05	3.97E-04	6.42E-05	1.55E-02	6.48E-05	9.66E-01	2.64E-04	88.3	54.43
6	Step 3.7%	3.16E-04	5.08E-05	5.20E-05	5.90E-05	3.49E-04	5.83E-05	1.45E-02	7.20E-05	9.79E-01	2.57E-04	90.1	60.32
7	Step 4.0%	2.03E-04	5.50E-05	8.22E-05	6.18E-05	3.77E-04	6.44E-05	1.23E-02	7.83E-05	8.94E-01	2.37E-04	93.0	67.08
8	Step 5.0%	3.41E-04	4.99E-05	1.77E-04	6.43E-05	6.05E-04	6.44E-05	2.54E-02	6.94E-05	2.03E+00	3.26E-04	94.9	75.09

9	Step 6.0%	3.53E-04	5.42E-05	1.40E-04	6.86E-05	7.09E-04	5.68E-05	2.99E-02	7.50E-05	2.65E+00	3.38E-04	95.9	84.13
10	Step 7.0%	3.90E-04	5.29E-05	1.41E-04	7.31E-05	9.55E-04	6.06E-05	4.42E-02	7.41E-05	4.16E+00	4.54E-04	97.1	90.63
11	Step 8.0%	5.24E-04	5.83E-05	1.18E-04	6.95E-05	1.61E-03	6.19E-05	7.49E-02	8.93E-05	7.22E+00	1.22E-03	97.8	93.35
12	Step 9.0%	4.85E-04	5.60E-05	1.72E-04	6.16E-05	1.87E-03	5.63E-05	9.33E-02	7.65E-05	9.17E+00	1.05E-03	98.4	95.80
13	Step 10.0%	5.69E-04	5.20E-05	1.60E-04	6.28E-05	2.16E-03	5.56E-05	1.02E-01	8.73E-05	1.03E+01	9.77E-04	98.3	98.24
14	Step 11.0%	4.84E-04	5.22E-05	2.16E-04	6.58E-05	2.15E-03	6.77E-05	1.06E-01	7.83E-05	1.08E+01	1.11E-03	98.6	99.64
15	Step 12.0%	4.63E-04	6.12E-05	3.48E-04	5.86E-05	2.39E-03	5.92E-05	1.19E-01	8.89E-05	1.22E+01	1.42E-03	98.8	100.02
16	Step 13.0%	4.46E-04	5.94E-05	3.40E-04	7.17E-05	2.52E-03	6.37E-05	1.26E-01	8.18E-05	1.28E+01	1.73E-03	98.9	99.68
17	Step 14.0%	3.58E-04	4.87E-05	4.62E-04	6.70E-05	2.82E-03	6.38E-05	1.41E-01	9.93E-05	1.42E+01	1.67E-03	99.2	99.10
18	Step 15.0%	3.42E-04	6.20E-05	4.42E-04	6.62E-05	2.78E-03	6.51E-05	1.41E-01	1.02E-04	1.41E+01	1.95E-03	99.3	98.56
19	Step 16.0%	2.68E-04	5.30E-05	4.35E-04	5.99E-05	2.52E-03	6.02E-05	1.28E-01	8.21E-05	1.28E+01	1.79E-03	99.4	98.26
20	Step 17.0%	1.96E-04	5.20E-05	2.66E-04	6.09E-05	1.09E-03	5.89E-05	5.12E-02	7.45E-05	5.05E+00	4.88E-04	98.8	96.36
21	Step 20.0%	2.15E-04	5.10E-05	3.25E-04	6.67E-05	1.51E-03	6.08E-05	7.30E-02	7.97E-05	7.19E+00	7.11E-04	99.1	96.59
22	Step 25.0%	1.69E-04	5.40E-05	1.91E-04	7.08E-05	1.03E-03	6.11E-05	4.50E-02	7.44E-05	4.37E+00	5.52E-04	98.8	94.96

Sample: 6813X1A

Project: Pamir_Gissar Arc

Owner: Lothar_Kaessner

Exp-Nr: 2596

Material: 2.13 mg Bt

Irradiation: FGA008P5H9 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 52:13.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.35E-06 f-value Err: 1.74E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2596: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	4.63E-04	8.01E-05	2.14E-04	8.91E-05	1.65E-04	8.32E-05	3.37E-03	1.03E-04	1.91E-01	2.46E-04	26.2	14.74
2	Step 2.5%	3.83E-04	4.79E-05	1.67E-04	6.05E-05	2.51E-04	6.87E-05	5.96E-03	7.62E-05	3.54E-01	1.90E-04	67.1	39.55
3	Step 2.8%	2.82E-04	5.79E-05	1.78E-04	7.46E-05	2.55E-04	5.73E-05	8.85E-03	7.68E-05	5.81E-01	2.11E-04	85.3	55.51
4	Step 3.1%	2.99E-04	5.47E-05	1.34E-04	5.06E-05	3.74E-04	6.75E-05	1.21E-02	7.71E-05	8.68E-01	2.37E-04	89.5	63.84
5	Step 3.4%	2.98E-04	5.22E-05	1.98E-04	7.10E-05	4.03E-04	6.18E-05	1.53E-02	7.01E-05	1.18E+00	2.35E-04	92.3	70.70
6	Step 3.7%	3.08E-04	4.95E-05	1.69E-04	6.39E-05	4.64E-04	5.61E-05	1.89E-02	6.60E-05	1.58E+00	2.77E-04	94.0	77.93
7	Step 4.0%	3.11E-04	5.22E-05	8.51E-05	6.47E-05	5.34E-04	6.99E-05	1.99E-02	6.59E-05	1.74E+00	2.59E-04	94.5	81.85
8	Step 4.5%	3.04E-04	5.51E-05	1.85E-04	6.84E-05	5.96E-04	6.13E-05	2.46E-02	7.52E-05	2.23E+00	2.94E-04	95.9	86.11
9	Step 5.0%	2.85E-04	5.25E-05	1.30E-04	7.33E-05	6.70E-04	5.88E-05	2.95E-02	7.03E-05	2.78E+00	1.80E-03	96.9	90.46
10	Step 6.0%	2.72E-04	5.85E-05	8.23E-05	6.71E-05	5.76E-04	6.03E-05	2.65E-02	7.23E-05	2.56E+00	3.20E-04	96.8	92.82
11	Step 7.0%	2.14E-04	5.02E-05	1.24E-04	6.82E-05	7.73E-04	6.21E-05	3.27E-02	7.66E-05	3.19E+00	2.82E-04	98.0	94.76
12	Step 8.0%	3.28E-04	4.84E-05	1.65E-04	7.84E-05	1.17E-03	6.06E-05	5.64E-02	6.91E-05	5.57E+00	5.05E-04	98.2	96.15
13	Step 9.0%	3.68E-04	5.29E-05	2.93E-04	6.71E-05	1.66E-03	6.67E-05	7.62E-02	9.17E-05	7.62E+00	6.57E-04	98.5	97.70
14	Step 10.0%	4.75E-04	4.96E-05	3.98E-04	6.00E-05	2.17E-03	5.91E-05	1.06E-01	8.26E-05	1.08E+01	1.26E-03	98.7	99.12

15	Step 10.7%	3.94E-04	5.21E-05	3.90E-04	6.96E-05	1.90E-03	6.06E-05	9.27E-02	8.99E-05	9.38E+00	8.97E-04	98.7	99.06
16	Step 11.5%	3.75E-04	5.86E-05	5.01E-04	6.74E-05	2.26E-03	7.22E-05	1.12E-01	8.09E-05	1.13E+01	1.09E-03	99.0	99.24
17	Step 12.3%	3.55E-04	5.02E-05	5.66E-04	7.89E-05	2.22E-03	6.32E-05	1.11E-01	8.68E-05	1.12E+01	1.39E-03	99.0	99.02
18	Step 13.1%	2.54E-04	5.02E-05	7.14E-04	6.21E-05	2.47E-03	5.88E-05	1.24E-01	9.67E-05	1.24E+01	1.86E-03	99.4	98.89
19	Step 14.0%	2.70E-04	6.00E-05	6.98E-04	6.57E-05	2.28E-03	6.00E-05	1.13E-01	8.18E-05	1.13E+01	1.36E-03	99.3	98.22
20	Step 16.0%	3.30E-04	5.54E-05	8.70E-04	7.62E-05	2.78E-03	5.60E-05	1.43E-01	9.38E-05	1.41E+01	1.59E-03	99.3	97.10
21	Step 20.0%	3.46E-04	5.13E-05	1.08E-03	7.55E-05	2.91E-03	7.18E-05	1.49E-01	8.06E-05	1.44E+01	1.69E-03	99.3	94.70
22	Step 25.0%	2.24E-04	5.33E-05	2.92E-04	7.29E-05	9.87E-04	6.52E-05	4.58E-02	9.53E-05	4.11E+00	3.49E-03	98.3	87.47

Sample: 6814A1

Project: Pamir_Gissar
Owner: Lothar_Kaessner

Exp-Nr: 2311

Material: 41.25 mg Hbl

Irradiation: FGA008P8H2 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 47:17.0

Device: HTC

Air: 2.96E+02

J-Value: 1.77E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.21E-06 f-value Err: 1.83E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2311: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 700°C	1.89E-03	9.52E-05	1.01E-02	9.19E-05	1.20E-03	7.65E-05	3.76E-02	8.36E-05	1.71E+00	2.42E-04	66.4	29.99
2	Step 750°C	1.44E-03	9.48E-05	6.72E-03	1.09E-04	1.31E-03	9.05E-05	5.61E-02	1.03E-04	3.23E+00	4.78E-04	86.4	49.37
3	Step 800°C	9.81E-04	7.83E-05	1.22E-02	9.36E-05	1.53E-03	6.56E-05	7.59E-02	1.02E-04	6.56E+00	5.29E-04	95.5	81.89
4	Step 850°C	8.49E-04	7.52E-05	3.41E-02	7.95E-05	2.11E-03	6.60E-05	1.05E-01	1.02E-04	9.87E+00	8.10E-04	97.4	90.46
5	Step 890°C	8.07E-04	7.68E-05	9.29E-02	9.65E-05	2.66E-03	7.43E-05	9.83E-02	8.76E-05	9.85E+00	6.57E-04	97.7	97.23
6	Step 920°C	1.19E-03	9.18E-05	3.15E-01	1.36E-04	6.14E-03	8.50E-05	1.50E-01	1.27E-04	1.62E+01	1.21E-03	98.1	105.40
7	Step 935°C	1.67E-03	1.12E-04	7.18E-01	1.89E-04	1.48E-02	1.07E-04	2.38E-01	1.49E-04	2.60E+01	1.70E-03	98.6	107.13
8	Step 940°C	1.10E-03	1.13E-04	5.60E-01	1.84E-04	1.25E-02	1.05E-04	1.87E-01	1.27E-04	2.01E+01	2.32E-03	98.8	105.86
9	Step 942°C	6.52E-04	1.07E-04	3.95E-01	1.63E-04	9.22E-03	9.71E-05	1.37E-01	1.18E-04	1.45E+01	1.26E-03	99.1	105.00
10	Step 944°C	4.80E-04	1.14E-04	2.88E-01	1.44E-04	7.00E-03	1.06E-04	1.04E-01	1.14E-04	1.10E+01	9.76E-04	99.2	104.22
11	Step 948°C	4.11E-04	1.03E-04	2.34E-01	1.56E-04	5.88E-03	1.03E-04	8.88E-02	1.21E-04	9.30E+00	7.69E-04	99.1	103.33
12	Step 960°C	3.30E-04	9.82E-05	2.44E-01	1.35E-04	6.59E-03	1.03E-04	1.03E-01	1.14E-04	1.07E+01	1.07E-03	99.5	102.60
13	Step 990°C	4.87E-04	8.28E-05	2.36E-01	1.12E-04	6.81E-03	8.75E-05	1.34E-01	1.24E-04	1.35E+01	1.90E-03	99.2	99.46
14	Step 1040°C	6.85E-04	8.75E-05	2.82E-01	1.15E-04	5.26E-03	8.41E-05	1.15E-01	1.21E-04	1.14E+01	1.33E-03	98.6	97.70
15	Step 1070°C	1.13E-03	7.29E-05	6.07E-01	1.59E-04	9.46E-03	8.41E-05	1.49E-01	1.23E-04	1.55E+01	1.84E-03	98.5	102.19
16	Step 1095°C	9.19E-04	7.37E-05	5.31E-01	1.45E-04	1.32E-02	8.84E-05	1.66E-01	1.11E-04	1.79E+01	2.08E-03	99.0	106.21
17	Step 1120°C	3.30E-04	7.16E-05	1.77E-01	1.07E-04	3.28E-03	8.42E-05	4.26E-02	9.08E-05	4.74E+00	5.20E-04	98.6	109.60
18	Step 1200°C	3.06E-04	7.69E-05	1.16E-02	9.13E-05	1.93E-04	8.00E-05	2.45E-03	1.02E-04	3.62E-01	3.77E-04	74.8	110.38

Sample: 6814B1

Project: Pamir_Gissar Arc
 Owner: Lothar_Kaessner

Exp-Nr: 2550

Material: 2.04 mg Bt

		Irradiation:	FGA008P4H6 (End date: 2010-10-27 06:47:00.0)										
		Measurement Date:	05:06.0										
		Device:	CO2-Laser										
		Air:	2.96E+02										
		J-Value:	1.81E-03										
		J-Value Error:	3.57E-06										
		f-value:	9.92E-01										
		f-value Err:	1.39E-04										
		Reference Standard(s):	FCT 28.305 ± 0.036 Ma										
2550:	Blank corrected intensity intercept	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
5	Step 4.0%	8.01E-04	7.85E-05	1.02E-03	9.67E-05	4.24E-04	7.31E-05	4.18E-03	8.83E-05	2.76E-01	2.70E-04	11.8	7.72
6	Step 4.5%	7.15E-04	5.80E-05	8.50E-04	8.43E-05	3.92E-04	6.31E-05	5.27E-03	7.15E-05	3.05E-01	2.48E-04	28.6	16.38
7	Step 5.0%	5.60E-04	7.15E-05	8.24E-04	8.24E-05	4.05E-04	7.10E-05	5.31E-03	8.71E-05	2.79E-01	2.68E-04	38.9	20.23
8	Step 5.5%	3.26E-04	7.43E-05	5.56E-04	7.58E-05	3.99E-04	7.42E-05	5.16E-03	8.78E-05	2.68E-01	2.39E-04	62.9	32.40
9	Step 6.0%	2.91E-04	6.77E-05	4.27E-04	8.61E-05	2.89E-04	6.25E-05	4.04E-03	7.86E-05	1.99E-01	1.92E-04	55.7	27.26
10	Step 6.5%	1.80E-04	6.86E-05	3.67E-04	9.14E-05	2.60E-04	6.91E-05	3.02E-03	7.17E-05	1.36E-01	1.85E-04	59.8	26.66
11	Step 7.0%	2.00E-04	5.81E-05	3.67E-04	9.13E-05	2.15E-04	7.51E-05	2.50E-03	7.41E-05	1.10E-01	1.82E-04	44.8	19.55
12	Step 7.5%	2.00E-04	7.29E-05	3.40E-04	8.05E-05	2.17E-04	6.42E-05	2.37E-03	7.48E-05	1.08E-01	2.27E-04	43.8	19.90
13	Step 8.0%	1.74E-04	7.30E-05	3.85E-04	9.91E-05	2.65E-04	7.11E-05	2.30E-03	8.57E-05	1.01E-01	1.60E-04	47.4	20.57
14	Step 8.5%	1.27E-04	6.64E-05	3.76E-04	8.51E-05	1.65E-04	7.10E-05	2.20E-03	8.52E-05	1.01E-01	2.14E-04	61.7	27.97
15	Step 9.0%	1.48E-04	6.51E-05	5.16E-04	8.30E-05	1.72E-04	6.70E-05	2.44E-03	7.85E-05	1.16E-01	2.48E-04	61.5	29.07
16	Step 9.5%	4.12E-05	5.70E-05	8.79E-04	7.40E-05	9.05E-05	6.97E-05	2.63E-03	8.19E-05	1.46E-01	2.94E-04	91.9	50.65
17	Step 9.8%	6.67E-05	6.80E-05	4.46E-04	8.43E-05	6.39E-05	6.25E-05	2.13E-03	7.26E-05	1.06E-01	2.04E-04	81.1	39.88
18	Step 10.1%	8.59E-05	6.14E-05	8.62E-04	7.77E-05	5.57E-05	7.16E-05	2.18E-03	8.00E-05	1.06E-01	2.11E-04	75.9	36.75
19	Step 10.4%	9.93E-05	6.08E-05	1.16E-03	7.56E-05	2.28E-05	6.52E-05	2.18E-03	6.79E-05	1.05E-01	2.32E-04	72.1	34.64
20	Step 10.7%	1.19E-04	5.84E-05	1.61E-03	7.98E-05	1.06E-04	6.55E-05	2.46E-03	7.24E-05	1.20E-01	2.25E-04	70.7	34.39
21	Step 11.0%	6.91E-05	6.41E-05	1.73E-03	7.45E-05	6.99E-05	6.37E-05	2.14E-03	8.04E-05	9.92E-02	1.83E-04	80.1	37.00
22	Step 11.5%	1.02E-04	5.90E-05	2.83E-03	8.13E-05	7.22E-05	7.40E-05	2.14E-03	6.51E-05	1.19E-01	2.64E-04	75.6	41.84
23	Step 12.0%	1.44E-04	6.38E-05	2.46E-03	8.75E-05	1.08E-04	6.86E-05	1.89E-03	8.65E-05	1.07E-01	2.22E-04	60.6	34.13
24	Step 12.5%	1.75E-04	7.76E-05	3.79E-03	8.78E-05	8.34E-05	6.14E-05	2.16E-03	8.15E-05	1.22E-01	2.12E-04	58.7	33.13
25	Step 13.0%	9.79E-05	6.89E-05	1.38E-03	8.04E-05	8.30E-05	5.31E-05	1.52E-03	7.73E-05	6.88E-02	1.54E-04	58.1	26.26
26	Step 14.0%	7.81E-05	7.15E-05	1.81E-03	8.80E-05	3.87E-05	7.28E-05	1.25E-03	6.82E-05	5.99E-02	1.81E-04	6.26E+01	3.01E+01
27	Step 16.0%	7.98E-05	7.58E-05	2.13E-03	9.85E-05	9.63E-05	7.08E-05	1.06E-03	8.26E-05	5.98E-02	1.75E-04	6.21E+01	3.53E+01

Sample: 6814B1_f

Project: Pamir_Gissar Arc
 Owner: Lothar_Kaessner

Exp-Nr: 2610

Irradiation: FGA008P6H2 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 08:42.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.79E-03

f-value: 9.91E-01

All Errors are 1s!

Material: 2.01 mg Bt

		J-Value Error: 4.41E-06								f-value Err: 1.43E-04				Fit model: quadratic		
		Reference Standard(s): FCT 28.305 ± 0.036 Ma														
2610:	Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)			
1	Step 2.0%	4.40E-04	5.46E-05	1.34E-04	5.94E-05	1.77E-04	5.85E-05	4.18E-04	6.71E-05	1.41E-01	1.89E-04	4.7	15.81			
2	Step 2.5%	3.65E-04	4.84E-05	1.86E-04	5.59E-05	1.41E-04	5.65E-05	6.10E-04	7.91E-05	1.29E-01	2.02E-04	13.7	28.69			
10	Step 9.0%	7.53E-04	6.05E-05	7.70E-04	6.34E-05	3.71E-04	5.16E-05	3.91E-03	5.44E-05	2.77E-01	1.92E-04	17.0	11.95			
11	Step 10.0%	7.79E-04	5.23E-05	7.28E-04	6.85E-05	4.59E-04	6.53E-05	4.88E-03	7.17E-05	3.08E-01	1.98E-04	22.9	14.33			
12	Step 11.0%	6.77E-04	5.08E-05	7.60E-04	6.41E-05	4.28E-04	5.41E-05	4.96E-03	6.55E-05	2.96E-01	2.17E-04	30.3	17.97			
13	Step 13.0%	8.04E-04	5.13E-05	2.47E-03	6.36E-05	4.93E-04	5.04E-05	9.07E-03	7.14E-05	6.15E-01	2.36E-04	60.4	40.66			
14	Step 15.0%	6.44E-04	5.05E-05	3.89E-03	5.58E-05	4.80E-04	5.83E-05	9.76E-03	7.41E-05	6.56E-01	3.19E-04	70.6	47.18			
15	Step 17.0%	3.35E-04	5.97E-05	1.68E-03	5.74E-05	2.02E-04	6.11E-05	4.02E-03	6.51E-05	2.21E-01	2.01E-04	54.4	29.71			
16	Step 20.0%	2.32E-04	5.20E-05	1.13E-03	6.59E-05	2.52E-04	5.53E-05	2.75E-03	6.13E-05	1.31E-01	1.88E-04	46.9	22.32			

Sample: 6814D1_g

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2613

Material: 2.21 mg Bt

Irradiation: FGA008P6H3 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 54:51.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.79E-03 f-value: 9.91E-01

J-Value Error: 4.41E-06 f-value Err: 1.43E-04

All Errors are 1s!

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

		J-Value Error: 4.41E-06								f-value Err: 1.43E-04				Fit model: quadratic		
		Reference Standard(s): FCT 28.305 ± 0.036 Ma														
2613:	Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)			
1	Step 2.0%	1.66E-04	5.60E-05	1.26E-05	5.61E-05	9.91E-05	5.53E-05	2.30E-03	6.09E-05	1.12E-01	1.84E-04	54.5	26.19			
2	Step 2.5%	3.62E-04	5.16E-05	1.04E-04	6.32E-05	2.36E-04	5.77E-05	7.04E-03	6.69E-05	4.74E-01	2.06E-04	76.7	51.13			
3	Step 2.8%	2.59E-04	4.87E-05	0.00E+00	6.65E-05	2.36E-04	6.36E-05	9.98E-03	7.21E-05	8.30E-01	2.19E-04	90.4	74.50			
4	Step 3.1%	3.56E-04	4.81E-05	4.91E-05	7.10E-05	4.44E-04	6.10E-05	1.85E-02	6.77E-05	1.63E+00	2.83E-04	93.3	81.47			
5	Step 3.4%	4.56E-04	5.32E-05	2.96E-05	6.25E-05	7.52E-04	6.23E-05	3.37E-02	6.80E-05	3.03E+00	4.08E-04	95.4	84.92			
6	Step 3.7%	4.97E-04	5.70E-05	4.32E-05	6.59E-05	1.36E-03	6.69E-05	6.12E-02	7.62E-05	5.67E+00	5.24E-04	97.3	89.27			
7	Step 4.0%	3.67E-04	4.83E-05	4.10E-05	6.19E-05	1.34E-03	6.15E-05	6.07E-02	7.45E-05	5.67E+00	4.95E-04	98.0	90.60			
8	Step 4.3%	2.04E-04	4.52E-05	2.45E-05	5.74E-05	1.33E-03	6.25E-05	6.25E-02	8.66E-05	5.84E+00	6.22E-04	98.9	91.55			
9	Step 4.7%	2.15E-04	4.64E-05	1.83E-05	5.76E-05	1.87E-03	6.29E-05	8.88E-02	8.92E-05	8.34E+00	9.92E-04	99.2	92.23			
10	Step 5.2%	2.22E-04	4.83E-05	3.53E-05	6.86E-05	1.90E-03	6.25E-05	9.11E-02	8.41E-05	8.57E+00	1.07E-03	99.2	92.44			
11	Step 5.7%	1.82E-04	4.56E-05	3.22E-05	6.30E-05	2.01E-03	5.94E-05	9.97E-02	9.23E-05	9.40E+00	7.71E-03	99.4	92.72			
12	Step 6.2%	1.41E-04	5.67E-05	2.35E-05	6.49E-05	1.54E-03	6.68E-05	7.35E-02	7.75E-05	6.92E+00	9.47E-04	99.4	92.62			
13	Step 7.0%	1.19E-04	5.37E-05	4.40E-05	6.61E-05	1.95E-03	6.30E-05	9.31E-02	8.75E-05	8.78E+00	1.10E-03	99.6	92.95			
14	Step 7.8%	1.15E-04	5.25E-05	6.82E-05	6.29E-05	1.81E-03	7.55E-05	8.91E-02	7.61E-05	8.40E+00	1.02E-03	99.6	92.93			
15	Step 8.6%	1.10E-04	4.69E-05	1.08E-04	7.52E-05	1.91E-03	6.30E-05	9.15E-02	1.03E-04	8.63E+00	6.61E-03	99.6	92.99			
16	Step 9.4%	1.43E-04	4.86E-05	1.86E-05	5.66E-05	2.01E-03	6.11E-05	1.00E-01	8.39E-05	9.46E+00	1.40E-03	99.5	92.77			

17	Step 10.2%	2.25E-04	5.15E-05	1.17E-04	6.67E-05	2.34E-03	6.79E-05	1.14E-01	9.23E-05	1.07E+01	1.51E-03	99.4	92.34
18	Step 11.0%	1.82E-04	4.89E-05	1.71E-04	6.51E-05	2.69E-03	5.40E-05	1.34E-01	8.42E-05	1.26E+01	1.64E-03	99.6	92.58
19	Step 11.7%	1.49E-04	4.83E-05	2.11E-04	6.36E-05	2.79E-03	6.18E-05	1.34E-01	1.03E-04	1.26E+01	1.41E-03	99.6	92.75
20	Step 12.3%	8.70E-05	5.24E-05	1.70E-04	6.56E-05	2.52E-03	6.04E-05	1.22E-01	9.82E-05	1.15E+01	1.78E-03	99.8	93.10
21	Step 13.0%	1.18E-04	4.76E-05	1.53E-04	6.12E-05	2.14E-03	5.82E-05	1.07E-01	1.38E-04	1.01E+01	8.12E-03	99.6	92.98
22	Step 14.0%	8.06E-05	4.93E-05	1.32E-04	6.15E-05	2.44E-03	6.05E-05	1.21E-01	9.06E-05	1.14E+01	1.63E-03	99.8	93.13
23	Step 16.0%	1.88E-04	4.68E-05	2.60E-04	5.92E-05	3.67E-03	5.69E-05	1.81E-01	9.10E-05	1.71E+01	2.59E-03	99.7	93.11
24	Step 20.0%	6.61E-05	4.85E-05	1.51E-04	7.00E-05	1.66E-03	6.20E-05	7.96E-02	8.66E-05	7.48E+00	9.66E-04	99.7	92.80
25	Step 25.0%	6.04E-05	5.25E-05	1.48E-04	7.21E-05	4.04E-04	5.88E-05	1.65E-02	6.64E-05	1.50E+00	2.53E-04	98.8	88.91

Sample: 6814G1

Project: Pamir_Gissar

Owner: Lothar_Kaessner

Exp-Nr: 2317

Material: 36.96 mg Hbl

Irradiation: FGA008P8H3 (End date: 2010-10-27 06:47:00.0)

Measurement I 37:33.0

Device: HTC

Air: 2.96E+02

J-Value: 1.77E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.21E-06 f-value Err: 1.83E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2317: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 Step 650°C	1.68E-03	8.23E-05	1.41E-03	9.00E-05	9.14E-04	7.67E-05	4.98E-02	9.09E-05	4.64E+00	4.08E-04	88.9	82.01
2 Step 700°C	8.75E-03	7.28E-05	1.69E-02	7.70E-05	5.31E-03	7.75E-05	2.59E-01	1.23E-04	2.13E+01	1.31E-03	87.5	71.30
3 Step 720°C	8.17E-03	7.44E-05	7.38E-03	8.12E-05	5.18E-03	6.99E-05	2.79E-01	1.03E-04	2.92E+01	1.55E-03	91.5	94.87
4 Step 730°C	3.27E-03	7.87E-05	3.01E-03	8.81E-05	3.24E-03	8.08E-05	2.21E-01	1.09E-04	2.30E+01	1.79E-03	95.7	98.69
5 Step 740°C	1.54E-03	6.23E-05	1.79E-03	7.22E-05	2.31E-03	6.37E-05	1.73E-01	1.16E-04	1.75E+01	1.40E-03	97.3	97.43
6 Step 750°C	1.21E-03	6.40E-05	1.27E-03	8.45E-05	1.77E-03	7.29E-05	1.30E-01	1.02E-04	1.29E+01	9.28E-04	97.1	95.45
7 Step 765°C	1.55E-03	6.24E-05	1.35E-03	7.79E-05	1.66E-03	7.53E-05	1.14E-01	8.91E-05	1.14E+01	5.33E-04	95.8	94.61
8 Step 800°C	2.55E-03	7.10E-05	2.34E-03	8.76E-05	1.90E-03	6.97E-05	1.11E-01	8.51E-05	1.09E+01	8.16E-04	92.9	89.89
9 Step 850°C	1.38E-03	6.70E-05	2.97E-03	9.13E-05	1.63E-03	6.66E-05	1.07E-01	8.61E-05	1.04E+01	7.76E-04	96.0	92.73
10 Step 900°C	1.07E-03	7.44E-05	4.70E-03	1.12E-04	1.56E-03	7.99E-05	1.10E-01	9.79E-05	1.05E+01	1.04E-03	96.9	91.21
11 Step 935°C	1.54E-03	8.67E-05	1.00E-02	1.05E-04	1.17E-03	7.93E-05	6.47E-02	1.01E-04	6.03E+00	5.61E-04	92.2	85.35
12 Step 970°C	1.68E-03	9.87E-05	2.42E-02	1.01E-04	1.12E-03	8.61E-05	5.10E-02	9.68E-05	4.58E+00	5.95E-04	88.9	79.20
13 Step 1020°C	1.19E-03	9.76E-05	1.67E-01	1.18E-04	9.03E-04	8.69E-05	4.99E-02	1.08E-04	3.73E+00	6.91E-04	91.1	67.85
14 Step 1080°C	1.46E-03	7.96E-05	1.33E-01	1.10E-04	8.62E-04	8.43E-05	3.60E-02	1.05E-04	3.35E+00	5.33E-04	87.4	81.01
15 Step 1140°C	1.18E-03	9.09E-05	3.21E-02	9.67E-05	8.05E-04	7.74E-05	3.99E-02	1.10E-04	3.43E+00	7.79E-04	89.6	76.42
16 Step 1200°C	3.45E-04	7.73E-05	7.64E-03	8.90E-05	1.27E-04	7.20E-05	4.94E-03	9.13E-05	4.68E-01	8.34E-04	77.8	73.37

Sample: 6814F1

Project: Pamir_Gissar Arc

Irradiation: FGA008P4H5 (End date: 2010-10-27 06:47:00.0)

Owner: Lothar_Kaessner

Exp-Nr: 254700.00%

Material: 4.85 mg Bt

Measurement Date: 22:39.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03

f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 3.57E-06

f-value Err: 1.39E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2547: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	2.45E-03	8.17E-05	1.69E-04	8.05E-05	6.63E-04	7.55E-05	4.07E-03	8.41E-05	8.02E-01	2.34E-04	6.8	13.20
2	Step 2.5%	5.49E-03	6.31E-05	5.44E-04	9.21E-05	1.47E-03	6.48E-05	1.41E-02	7.98E-05	2.10E+00	3.12E-04	20.2	29.75
3	Step 2.8%	2.14E-03	7.60E-05	7.85E-04	8.58E-05	9.82E-04	8.29E-05	2.08E-02	9.35E-05	1.24E+00	4.63E-04	47.3	27.88
4	Step 3.0%	1.23E-03	9.14E-05	8.07E-04	9.88E-05	1.07E-03	8.57E-05	3.27E-02	1.01E-04	1.24E+00	4.79E-04	69.8	26.27
5	Step 3.2%	1.20E-03	7.15E-05	7.56E-04	8.57E-05	1.13E-03	7.57E-05	4.43E-02	9.54E-05	1.76E+00	4.86E-04	79.2	31.21
6	Step 3.4%	1.74E-03	7.64E-05	6.14E-04	7.71E-05	1.46E-03	8.31E-05	5.23E-02	8.10E-05	3.11E+00	3.54E-04	82.9	48.81
7	Step 3.6%	1.51E-03	6.56E-05	6.44E-04	7.65E-05	1.63E-03	6.95E-05	6.06E-02	8.69E-05	5.42E+00	3.51E-04	91.5	81.08
8	Step 3.8%	1.11E-03	5.00E-05	5.94E-04	7.15E-05	1.75E-03	6.80E-05	7.31E-02	8.29E-05	6.84E+00	5.19E-04	95.0	88.16
9	Step 4.0%	8.40E-04	5.95E-05	5.25E-04	7.65E-05	1.92E-03	6.98E-05	8.18E-02	9.97E-05	7.82E+00	5.29E-04	96.7	91.69
10	Step 4.2%	7.03E-04	7.36E-05	5.49E-04	7.44E-05	2.11E-03	6.72E-05	9.91E-02	8.61E-05	9.67E+00	6.57E-04	97.8	94.57
11	Step 4.4%	6.23E-04	5.96E-05	7.11E-04	8.22E-05	2.44E-03	7.06E-05	1.18E-01	1.12E-04	1.18E+01	6.92E-04	98.4	97.52
12	Step 4.6%	4.31E-04	5.87E-05	9.31E-04	7.79E-05	2.38E-03	6.89E-05	1.16E-01	9.09E-05	1.19E+01	5.60E-04	98.9	100.46
13	Step 4.8%	3.69E-04	7.66E-05	1.28E-03	7.59E-05	2.03E-03	8.12E-05	1.00E-01	1.14E-04	1.05E+01	4.55E-03	98.9	102.70
14	Step 5.0%	4.12E-04	6.40E-05	8.41E-04	8.39E-05	1.95E-03	7.86E-05	9.41E-02	9.85E-05	9.98E+00	6.61E-04	98.7	103.73
15	Step 5.2%	3.95E-04	6.83E-05	7.00E-04	8.85E-05	1.60E-03	8.15E-05	7.36E-02	6.50E-05	7.81E+00	5.36E-04	98.5	103.55
16	Step 5.5%	5.39E-04	6.57E-05	6.54E-04	7.06E-05	1.59E-03	6.57E-05	8.03E-02	8.01E-05	8.57E+00	1.24E-03	98.1	103.70
17	Step 5.9%	6.75E-04	5.85E-05	5.51E-04	7.23E-05	1.44E-03	6.38E-05	6.68E-02	7.90E-05	7.32E+00	5.74E-04	97.2	105.47
18	Step 6.5%	1.10E-03	6.87E-05	1.14E-03	8.19E-05	2.11E-03	6.97E-05	9.65E-02	1.02E-04	1.09E+01	8.11E-04	96.9	108.46
19	Step 7.0%	9.46E-04	7.47E-05	1.34E-03	7.74E-05	2.55E-03	6.12E-05	1.22E-01	1.09E-04	1.38E+01	1.09E-03	97.9	110.02
20	Step 7.4%	4.61E-04	7.21E-05	8.53E-04	8.18E-05	1.86E-03	7.59E-05	9.00E-02	9.81E-05	1.01E+01	8.65E-04	98.6	109.30
21	Step 7.8%	5.04E-04	7.13E-05	8.47E-04	8.82E-05	2.10E-03	7.42E-05	1.12E-01	8.54E-05	1.24E+01	8.76E-04	98.8	108.32
22	Step 8.2%	3.28E-04	7.31E-05	6.71E-04	9.94E-05	2.04E-03	6.78E-05	1.07E-01	9.21E-05	1.17E+01	1.12E-03	99.1	107.48
23	Step 8.6%	2.55E-04	1.04E-04	6.97E-04	1.18E-04	1.87E-03	1.06E-04	1.01E-01	1.09E-04	1.09E+01	1.02E-03	99.3	106.16
24	Step 9.0%	1.55E-04	7.99E-05	6.99E-04	8.42E-05	1.71E-03	8.51E-05	8.92E-02	1.06E-04	9.48E+00	1.72E-03	99.5	104.83
25	Step 9.5%	1.56E-04	7.49E-05	9.50E-04	7.46E-05	1.57E-03	5.95E-05	8.00E-02	9.37E-05	8.43E+00	1.28E-03	99.4	103.73
26	Step 10.3%	9.87E-05	6.14E-05	2.11E-03	8.22E-05	1.19E-03	7.05E-05	6.40E-02	8.38E-05	6.69E+00	8.80E-04	9.96E+01	1.03E+02
27	Step 12.0%	6.14E-05	6.81E-05	3.61E-03	8.51E-05	6.81E-04	7.92E-05	3.34E-02	8.03E-05	3.52E+00	4.54E-04	9.95E+01	1.04E+02
28	Step 15.0%	1.55E-04	7.45E-05	4.72E-03	7.42E-05	8.29E-04	5.96E-05	4.53E-02	8.02E-05	4.78E+00	5.51E-04	9.91E+01	1.04E+02
29	Step 20.0%	1.87E-04	7.59E-05	6.30E-03	8.13E-05	9.31E-04	7.42E-05	4.69E-02	1.07E-04	4.84E+00	4.13E-04	9.89E+01	1.01E+02
30	Step 25.0%	5.19E-05	7.82E-05	1.94E-03	7.95E-05	4.91E-04	7.27E-05	1.85E-02	8.42E-05	1.77E+00	2.46E-04	9.92E+01	9.40E+01

Sample: 6910C1_f
 Project: Pamir_Gissar Arc
 Owner: Lothar_Kaessner

Exp-Nr: 2630
 Material: 3.12 mg Bt

Irradiation: FGA008P6H4 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 48:51.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.79E-03 f-value: 9.91E-01

All Errors are 1s!

J-Value Error: 4.41E-06 f-value Err: 1.15E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2630: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	3.09E-04	5.24E-05	0.00E+00	6.32E-05	1.53E-04	5.60E-05	2.68E-03	6.67E-05	1.82E-01	1.88E-04	48.0	32.37
2	Step 2.5%	1.38E-04	5.47E-05	4.74E-05	6.27E-05	1.36E-04	5.69E-05	2.91E-03	7.53E-05	1.76E-01	1.93E-04	76.0	45.61
3	Step 2.8%	2.70E-04	5.35E-05	8.52E-05	6.10E-05	2.52E-04	6.16E-05	5.25E-03	7.09E-05	3.46E-01	2.34E-04	76.1	49.71
4	Step 3.1%	2.86E-04	5.06E-05	4.56E-05	7.78E-05	2.34E-04	5.71E-05	7.95E-03	7.00E-05	5.79E-01	2.39E-04	84.9	61.24
5	Step 3.4%	2.43E-04	5.28E-05	7.03E-05	6.15E-05	3.64E-04	6.48E-05	1.02E-02	7.12E-05	7.83E-01	2.13E-04	90.5	69.07
6	Step 3.7%	3.73E-04	4.43E-05	1.05E-04	5.32E-05	5.59E-04	6.02E-05	2.03E-02	5.88E-05	1.63E+00	7.83E-04	93.0	73.64
7	Step 4.1%	3.77E-04	5.23E-05	1.40E-04	6.87E-05	7.08E-04	5.56E-05	2.46E-02	6.85E-05	2.12E+00	3.53E-04	94.6	80.67
8	Step 4.7%	5.39E-04	4.82E-05	1.34E-04	6.51E-05	9.83E-04	5.55E-05	3.79E-02	7.87E-05	3.35E+00	4.05E-04	95.1	83.23
9	Step 5.5%	5.48E-04	5.15E-05	1.37E-04	6.09E-05	1.25E-03	5.52E-05	5.22E-02	7.95E-05	4.86E+00	4.22E-04	96.5	89.01
10	Step 6.5%	5.63E-04	4.90E-05	1.38E-04	6.47E-05	1.46E-03	6.41E-05	6.27E-02	7.84E-05	6.14E+00	9.36E-04	97.2	94.31
11	Step 7.5%	3.80E-04	5.41E-05	1.47E-04	6.90E-05	1.48E-03	5.89E-05	6.73E-02	7.39E-05	6.75E+00	8.72E-04	98.3	97.56
12	Step 8.3%	3.52E-04	5.10E-05	1.58E-04	5.82E-05	1.90E-03	5.69E-05	8.54E-02	9.07E-05	8.69E+00	4.30E-03	98.8	99.55
13	Step 9.0%	3.56E-04	4.63E-05	1.94E-04	6.10E-05	2.21E-03	6.42E-05	1.02E-01	9.32E-05	1.05E+01	1.17E-03	99.0	100.40
14	Step 9.7%	2.93E-04	4.53E-05	1.87E-04	6.78E-05	2.73E-03	5.80E-05	1.30E-01	9.40E-05	1.34E+01	1.84E-03	99.3	101.47
15	Step 10.4%	1.86E-04	4.97E-05	1.55E-04	7.06E-05	2.69E-03	4.97E-05	1.29E-01	9.73E-05	1.33E+01	6.29E-03	99.6	102.20
16	Step 11.2%	2.38E-04	5.50E-05	2.26E-04	7.14E-05	2.83E-03	5.99E-05	1.35E-01	9.45E-05	1.41E+01	1.91E-03	99.5	102.71
17	Step 12.2%	2.92E-04	5.14E-05	4.21E-04	6.83E-05	3.79E-03	6.24E-05	1.85E-01	9.41E-05	1.94E+01	2.62E-03	99.5	103.37
18	Step 13.0%	2.97E-04	5.87E-05	5.34E-04	6.16E-05	3.59E-03	6.29E-05	1.75E-01	1.00E-04	1.83E+01	2.86E-03	99.5	102.89
19	Step 13.7%	1.78E-04	5.29E-05	5.36E-04	6.28E-05	3.74E-03	5.73E-05	1.85E-01	1.04E-04	1.93E+01	2.29E-03	99.7	102.72
20	Step 15.0%	2.49E-04	4.84E-05	9.04E-04	6.75E-05	5.39E-03	5.28E-05	2.65E-01	1.26E-04	2.75E+01	4.64E-03	99.7	102.39
21	Step 20.0%	4.43E-04	4.36E-05	1.25E-03	6.19E-05	9.35E-03	5.94E-05	4.69E-01	1.37E-04	4.84E+01	7.95E-03	99.7	101.78
22	Step 25.0%	1.95E-04	5.26E-05	7.55E-04	6.13E-05	3.78E-03	5.61E-05	1.86E-01	9.06E-05	1.91E+01	2.59E-03	99.7	101.28
23	Step 30.0%	0.00E+00	5.83E-05	8.11E-05	6.58E-05	4.31E-04	5.72E-05	2.68E-02	7.25E-05	2.74E+00	4.22E-04	100.0	101.33

Sample: 6910C1_g
 Project: Pamir_Gissar Arc
 Owner: Lothar_Kaessner

Irradiation: FGA008P6H5 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 43:03.0

Device: CO2-Laser

Air: 2.96E+02

Exp-Nr:	2616	J-Value:	1.79E-03	f-value:	9.91E-01	All Errors are 1s!								
Material:	2.46 mg Bt	J-Value Error:	4.41E-06	f-value Err:	1.43E-04	Fit model: quadratic								
Reference Standard(s): FCT 28.305 ± 0.036 Ma														
2616: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)		
1 Step 2.0%	5.02E-04	4.89E-05	3.68E-05	6.78E-05	2.10E-04	5.40E-05	2.13E-03	7.14E-05	2.83E-01	1.78E-04	45.7	60.22		
2 Step 2.5%	8.05E-04	5.12E-05	2.27E-04	6.39E-05	2.90E-04	5.89E-05	9.00E-03	6.73E-05	8.90E-01	6.82E-04	72.3	70.77		
3 Step 2.8%	4.72E-04	5.07E-05	3.02E-04	6.16E-05	3.53E-04	6.14E-05	1.28E-02	6.93E-05	1.21E+00	2.82E-04	88.1	82.15		
4 Step 3.1%	4.13E-04	5.27E-05	2.05E-04	7.19E-05	3.34E-04	6.14E-05	1.40E-02	7.43E-05	1.29E+00	2.63E-04	90.2	82.28		
5 Step 3.4%	7.13E-04	5.27E-05	4.98E-04	5.91E-05	9.51E-04	6.25E-05	4.07E-02	7.22E-05	4.05E+00	3.32E-04	94.6	93.20		
6 Step 3.7%	6.60E-04	5.44E-05	4.59E-04	6.37E-05	1.21E-03	5.09E-05	5.46E-02	8.58E-05	5.64E+00	6.54E-04	96.4	98.51		
7 Step 4.1%	2.85E-04	4.96E-05	2.76E-04	6.57E-05	8.09E-04	5.57E-05	3.71E-02	7.17E-05	3.80E+00	5.29E-04	97.7	99.10		
8 Step 4.7%	3.01E-04	5.09E-05	2.35E-04	6.68E-05	1.15E-03	6.31E-05	5.37E-02	8.22E-05	5.51E+00	7.15E-04	98.3	99.84		
9 Step 5.5%	2.35E-04	5.00E-05	2.43E-04	6.51E-05	1.35E-03	5.26E-05	6.84E-02	9.64E-05	6.97E+00	7.01E-03	99.0	99.83		
10 Step 6.5%	1.64E-04	4.66E-05	2.63E-04	5.75E-05	1.99E-03	6.04E-05	9.90E-02	8.76E-05	1.01E+01	1.25E-03	99.5	100.04		
11 Step 7.5%	2.21E-04	5.38E-05	3.75E-04	6.52E-05	2.49E-03	6.36E-05	1.27E-01	7.86E-05	1.29E+01	1.61E-03	99.5	99.90		
12 Step 8.3%	1.21E-04	4.59E-05	3.01E-04	6.44E-05	2.35E-03	6.78E-05	1.21E-01	9.47E-05	1.23E+01	2.20E-03	99.7	99.81		
13 Step 9.0%	1.73E-04	4.98E-05	2.55E-04	7.13E-05	2.09E-03	5.78E-05	1.14E-01	8.40E-05	1.17E+01	1.77E-03	99.5	101.31		
14 Step 9.7%	1.32E-04	4.52E-05	1.89E-04	6.28E-05	2.15E-03	5.90E-05	1.14E-01	8.17E-05	1.17E+01	1.76E-03	99.7	101.65		
15 Step 10.4%	7.74E-05	4.20E-05	2.08E-04	6.25E-05	2.08E-03	6.28E-05	1.08E-01	9.23E-05	1.11E+01	1.82E-03	99.8	101.48		
16 Step 11.2%	7.59E-05	5.16E-05	2.13E-04	6.45E-05	1.96E-03	6.13E-05	1.04E-01	8.87E-05	1.06E+01	1.28E-03	99.8	101.05		
17 Step 12.2%	1.68E-04	5.03E-05	3.83E-04	6.71E-05	3.33E-03	5.36E-05	1.74E-01	9.90E-05	1.77E+01	2.43E-03	99.7	100.72		
18 Step 13.0%	1.68E-04	4.59E-05	4.71E-04	6.44E-05	2.68E-03	6.36E-05	1.39E-01	9.17E-05	1.41E+01	1.88E-03	99.6	100.38		
19 Step 13.7%	3.19E-05	4.74E-05	2.14E-04	6.56E-05	7.05E-04	5.89E-05	3.73E-02	6.72E-05	3.79E+00	5.23E-04	99.7	100.28		
20 Step 15.0%	3.94E-05	4.61E-05	1.87E-04	6.93E-05	4.02E-04	6.62E-05	2.19E-02	7.29E-05	2.23E+00	3.36E-04	99.5	100.35		
21 Step 20.0%	4.18E-04	5.61E-05	1.65E-03	6.78E-05	3.61E-03	5.92E-05	1.85E-01	1.35E-04	1.88E+01	8.16E-03	99.3	100.05		
22 Step 25.0%	1.16E-04	5.45E-05	7.49E-04	6.62E-05	4.33E-04	5.47E-05	2.44E-02	7.89E-05	2.47E+00	4.04E-04	98.6	98.72		

Sample: 6910D1

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2561
Material: 2.45 mg Bt

2561: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 Step 2.0%	2.96E-04	1.16E-04	1.33E-04	1.30E-04	9.10E-05	1.23E-04	3.09E-03	1.33E-04	1.75E-01	3.57E-04	48.3	27.12
2 Step 2.5%	3.65E-04	5.87E-05	2.46E-04	8.86E-05	3.27E-04	7.80E-05	1.51E-02	9.28E-05	6.91E-01	2.35E-04	83.9	37.94

3	Step 2.8%	2.40E-04	6.95E-05	2.77E-04	8.76E-05	4.87E-04	6.53E-05	2.93E-02	7.79E-05	1.47E+00	4.66E-04	95.0	47.32
4	Step 3.1%	3.62E-04	7.50E-05	4.86E-04	7.94E-05	8.08E-04	7.44E-05	4.68E-02	9.95E-05	3.20E+00	3.59E-04	96.6	65.48
5	Step 3.4%	3.19E-04	7.95E-05	5.33E-04	7.38E-05	9.69E-04	7.30E-05	5.89E-02	1.01E-04	4.71E+00	4.20E-04	97.9	77.54
6	Step 3.7%	3.25E-04	6.66E-05	4.25E-04	7.42E-05	1.18E-03	6.85E-05	7.30E-02	9.89E-05	6.43E+00	4.21E-03	98.5	85.90
7	Step 4.0%	2.11E-04	6.55E-05	3.00E-04	8.20E-05	1.56E-03	6.80E-05	1.02E-01	9.50E-05	9.66E+00	8.17E-04	99.3	92.72
8	Step 4.3%	1.49E-04	7.48E-05	2.48E-04	8.18E-05	1.43E-03	6.27E-05	9.62E-02	9.73E-05	9.18E+00	8.77E-04	99.5	94.08
9	Step 4.6%	1.97E-04	7.19E-05	1.92E-04	7.32E-05	1.36E-03	7.98E-05	9.08E-02	8.72E-05	8.75E+00	8.35E-04	99.3	94.83
10	Step 4.9%	1.95E-04	8.21E-05	2.88E-04	8.61E-05	1.33E-03	8.45E-05	8.50E-02	9.70E-05	8.23E+00	8.60E-04	99.3	95.15
11	Step 5.3%	1.70E-04	6.43E-05	2.14E-04	7.53E-05	1.17E-03	6.20E-05	7.32E-02	8.73E-05	7.11E+00	5.53E-04	99.3	95.49
12	Step 5.7%	1.38E-04	5.44E-05	1.63E-04	6.06E-05	1.04E-03	5.81E-05	6.76E-02	8.88E-05	6.68E+00	5.87E-04	99.4	97.35
13	Step 6.3%	1.37E-04	5.07E-05	1.43E-04	6.80E-05	8.68E-04	6.15E-05	5.09E-02	7.09E-05	5.05E+00	4.98E-04	99.2	97.45
14	Step 7.3%	1.23E-04	5.69E-05	2.39E-04	6.23E-05	1.00E-03	7.04E-05	6.71E-02	8.63E-05	6.83E+00	1.01E-03	99.5	100.28
15	Step 8.5%	1.80E-04	5.55E-05	3.63E-04	7.10E-05	2.30E-03	6.76E-05	1.54E-01	9.03E-05	1.59E+01	2.47E-03	99.7	102.46
16	Step 9.5%	2.17E-04	5.07E-05	4.23E-04	7.38E-05	2.43E-03	6.20E-05	1.70E-01	1.15E-04	1.73E+01	1.76E-03	99.6	100.38
17	Step 10.5%	1.73E-04	6.59E-05	6.00E-04	8.07E-05	2.45E-03	5.95E-05	1.67E-01	9.72E-05	1.66E+01	1.38E-03	99.7	98.45
18	Step 11.5%	1.01E-04	6.34E-05	2.69E-04	6.27E-05	1.46E-03	6.39E-05	9.93E-02	9.80E-05	9.76E+00	4.36E-04	99.7	97.11
19	Step 13.5%	1.35E-04	5.77E-05	2.29E-04	6.78E-05	9.59E-04	6.57E-05	6.19E-02	9.69E-05	6.05E+00	4.70E-04	99.3	96.24
20	Step 20.0%	5.34E-05	6.95E-05	4.06E-04	8.28E-05	9.42E-04	7.61E-05	5.76E-02	7.67E-05	4.96E+00	3.75E-04	99.7	85.04
21	Step 25.0%	1.24E-04	6.28E-05	4.57E-04	6.44E-05	3.79E-04	7.33E-05	1.78E-02	7.72E-05	1.57E+00	3.17E-04	97.6	85.02

Sample: 6910F1

Project: Pamir_Gissar Arc

Owner: Lothar_Kaessner

Exp-Nr: 2590

Material: 2.19 mg Musc

Irradiation: FGA008P5H7 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 45:59.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.35E-06 f-value Err: 1.74E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2590: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)	
1	Step 2.0%	2.02E-04	8.31E-05	0.00E+00	1.03E-04	2.36E-04	1.02E-04	3.30E-03	8.60E-05	3.83E-01	3.37E-04	83.9	96.68
2	Step 2.5%	2.70E-04	5.82E-05	1.13E-04	6.86E-05	4.84E-04	6.09E-05	3.61E-02	7.74E-05	2.05E+00	2.72E-04	96.0	54.16
3	Step 2.8%	1.09E-04	5.86E-05	2.13E-05	5.86E-05	4.22E-04	5.53E-05	3.55E-02	6.47E-05	1.83E+00	2.93E-04	98.2	50.17
4	Step 3.1%	8.86E-05	5.56E-05	5.23E-05	7.31E-05	5.03E-04	5.00E-05	4.48E-02	7.58E-05	2.71E+00	3.38E-04	99.0	59.40
5	Step 3.4%	7.36E-05	5.52E-05	3.54E-05	6.01E-05	8.64E-04	6.46E-05	7.01E-02	8.76E-05	4.59E+00	1.20E-03	99.5	64.66
6	Step 3.7%	1.20E-04	5.45E-05	5.42E-05	6.05E-05	9.33E-04	5.58E-05	7.59E-02	7.87E-05	5.37E+00	5.80E-04	99.3	69.65
7	Step 4.0%	5.44E-05	6.24E-05	3.71E-05	6.65E-05	6.25E-04	6.66E-05	5.11E-02	8.86E-05	3.77E+00	4.09E-04	99.6	72.73
8	Step 4.3%	1.06E-04	5.48E-05	3.85E-05	6.37E-05	6.63E-04	5.73E-05	5.38E-02	1.06E-04	4.10E+00	3.16E-03	99.2	74.89
9	Step 4.8%	3.98E-05	5.83E-05	1.03E-04	6.46E-05	7.15E-04	6.23E-05	5.81E-02	6.67E-05	4.55E+00	4.52E-04	99.7	77.35

10	Step 5.5%	7.98E-05	5.38E-05	1.19E-04	5.66E-05	1.10E-03	6.95E-05	9.06E-02	8.27E-05	7.52E+00	6.60E-04	99.7	81.95
11	Step 6.2%	1.04E-04	5.75E-05	7.41E-05	6.81E-05	1.08E-03	6.35E-05	8.61E-02	7.54E-05	7.08E+00	1.13E-03	99.6	81.19
12	Step 7.0%	9.89E-05	5.87E-05	1.61E-04	6.91E-05	1.31E-03	5.67E-05	1.03E-01	9.65E-05	8.60E+00	1.25E-03	99.6	82.65
13	Step 7.8%	1.82E-04	5.08E-05	2.68E-04	6.78E-05	1.93E-03	5.78E-05	1.61E-01	8.70E-05	1.39E+01	1.75E-03	99.6	84.79
14	Step 8.3%	1.84E-04	5.82E-05	1.77E-04	6.89E-05	1.47E-03	5.59E-05	1.18E-01	8.45E-05	1.03E+01	1.05E-03	99.5	85.72
15	Step 8.8%	1.90E-04	5.19E-05	1.82E-04	6.29E-05	1.15E-03	6.33E-05	9.37E-02	8.55E-05	8.22E+00	1.23E-03	99.3	86.40
16	Step 9.5%	2.08E-04	5.70E-05	2.62E-04	7.05E-05	1.32E-03	5.42E-05	1.09E-01	8.43E-05	9.71E+00	1.34E-03	99.3	87.46
17	Step 10.2%	2.36E-04	7.35E-05	4.09E-04	8.66E-05	8.32E-04	8.65E-05	6.19E-02	9.32E-05	5.53E+00	7.59E-04	98.7	87.36
18	Step 12.0%	6.34E-05	5.91E-05	2.11E-04	5.72E-05	5.10E-04	6.34E-05	3.97E-02	8.33E-05	3.56E+00	4.86E-04	99.5	88.35
19	Step 16.0%	7.72E-05	6.61E-05	6.96E-05	7.86E-05	2.81E-04	6.21E-05	2.25E-02	7.46E-05	1.95E+00	3.62E-04	98.8	85.00
20	Step 25.0%	4.74E-05	6.23E-05	7.56E-05	7.07E-05	2.22E-04	6.05E-05	1.04E-02	6.87E-05	9.19E-01	2.29E-04	98.4	86.00

Sample: **GW20**

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2564

Material: 3.78 mg Bt

Irradiation: FGA008P4H8 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 44:02.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 3.57E-06 f-value Err: 1.75E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2564: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	6.29E-04	5.87E-05	5.12E-05	7.22E-05	2.10E-04	6.19E-05	3.30E-03	7.53E-05	2.88E-01	3.91E-04	33.3	28.72
2	Step 2.5%	7.17E-04	5.36E-05	1.17E-04	6.20E-05	4.95E-04	6.89E-05	1.66E-02	6.48E-05	1.31E+00	3.21E-04	83.3	65.25
3	Step 2.8%	3.90E-04	5.90E-05	1.14E-04	6.84E-05	5.44E-04	6.54E-05	2.39E-02	6.41E-05	1.87E+00	3.35E-04	93.6	72.62
4	Step 3.1%	4.94E-04	5.62E-05	9.14E-05	7.12E-05	1.11E-03	6.48E-05	6.44E-02	7.09E-05	5.66E+00	4.84E-04	97.3	84.77
5	Step 3.4%	3.11E-04	6.26E-05	6.35E-05	7.66E-05	1.23E-03	6.81E-05	7.85E-02	7.82E-05	7.24E+00	7.78E-04	98.7	90.25
6	Step 3.7%	4.58E-04	6.51E-05	6.97E-05	7.65E-05	2.15E-03	7.43E-05	1.40E-01	1.02E-04	1.33E+01	1.06E-03	98.9	92.83
7	Step 3.9%	2.29E-04	6.22E-05	3.12E-07	6.68E-05	2.42E-03	6.57E-05	1.71E-01	9.08E-05	1.63E+01	1.75E-03	99.6	93.97
8	Step 4.0%	1.32E-04	5.93E-05	0	7.45E-05	1.63E-03	7.12E-05	1.13E-01	1.02E-04	1.07E+01	1.06E-03	99.6	93.99
9	Step 4.1%	4.89E-05	5.76E-05	4.38E-05	7.03E-05	1.26E-03	6.31E-05	8.40E-02	6.89E-05	8.00E+00	8.21E-04	99.8	94.14
10	Step 4.3%	1.53E-04	5.61E-05	5.71E-06	6.91E-05	1.28E-03	6.39E-05	7.96E-02	7.60E-05	7.56E+00	5.76E-04	99.4	93.50
11	Step 4.6%	1.21E-04	6.01E-05	7.50E-05	7.67E-05	1.41E-03	7.90E-05	9.82E-02	7.82E-05	9.29E+00	7.48E-04	99.6	93.36
12	Step 4.9%	5.60E-05	5.82E-05	9.06E-06	8.20E-05	1.51E-03	6.09E-05	9.99E-02	8.04E-05	9.50E+00	8.81E-04	99.8	93.99
13	Step 5.2%	1.11E-04	6.38E-05	6.68E-06	7.21E-05	1.44E-03	6.50E-05	9.79E-02	8.29E-05	9.31E+00	8.43E-04	99.6	93.85
14	Step 5.5%	8.30E-05	5.13E-05	0.00E+00	6.54E-05	1.28E-03	6.78E-05	8.39E-02	7.72E-05	7.97E+00	9.70E-04	99.7	93.82
15	Step 5.9%	1.12E-04	5.90E-05	5.76E-05	6.63E-05	1.18E-03	6.54E-05	7.68E-02	6.92E-05	7.29E+00	6.86E-04	99.5	93.66
16	Step 6.5%	5.43E-05	5.72E-05	8.63E-05	7.65E-05	1.06E-03	6.19E-05	7.32E-02	7.57E-05	6.96E+00	6.97E-04	99.8	93.90
17	Step 7.5%	1.59E-04	6.86E-05	8.07E-05	7.35E-05	1.64E-03	7.64E-05	1.10E-01	1.06E-04	1.05E+01	8.97E-04	99.5	94.19

18	Step 8.5%	2.09E-04	5.10E-05	8.54E-05	6.71E-05	2.44E-03	6.86E-05	1.63E-01	8.94E-05	1.57E+01	1.52E-03	99.6	94.95
20	Step 10.5%	2.68E-04	5.50E-05	3.63E-04	6.97E-05	4.81E-03	6.57E-05	3.28E-01	1.03E-04	3.15E+01	3.15E-03	99.7	94.86
21	Step 11.5%	2.09E-04	6.47E-05	2.75E-04	7.31E-05	4.68E-03	7.34E-05	3.22E-01	1.19E-04	3.07E+01	2.84E-03	99.8	94.48
22	Step 12.5%	1.66E-04	5.70E-05	2.06E-04	7.25E-05	3.34E-03	6.38E-05	2.31E-01	9.55E-05	2.20E+01	2.32E-03	99.8	94.24
23	Step 14.5%	1.55E-04	5.79E-05	2.69E-04	7.57E-05	3.97E-03	6.59E-05	2.76E-01	1.14E-04	2.63E+01	4.56E-03	99.8	94.21
24	Step 20.0%	8.38E-05	5.89E-05	2.39E-04	7.59E-05	3.74E-03	6.28E-05	2.71E-01	1.12E-04	2.58E+01	4.85E-03	99.9	94.21
25	Step 25.0%	1.20E-04	5.28E-05	8.79E-05	7.15E-05	9.82E-04	6.44E-05	6.05E-02	6.86E-05	5.72E+00	7.94E-04	99.4	93.11

Sample: GW23

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2567

Material: 2.07 mg Bt

Irradiation: FGA008P5H2 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 07:45.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.35E-06 f-value Err: 1.75E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	2567: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	4.85E-04	5.19E-05	7.19E-05	7.65E-05	9.79E-05	6.30E-05	4.12E-03	6.31E-05	2.62E-01	2.98E-04	43.4	27.31
2	Step 2.5%	4.01E-04	5.76E-05	1.76E-04	7.54E-05	3.35E-04	5.27E-05	1.34E-02	7.20E-05	7.81E-01	1.94E-04	84.3	48.84
3	Step 2.8%	4.89E-04	6.58E-05	1.87E-04	6.52E-05	4.87E-04	5.76E-05	2.62E-02	6.63E-05	1.88E+00	2.58E-04	92.1	65.40
4	Step 3.1%	4.93E-04	6.39E-05	1.66E-04	7.17E-05	6.69E-04	5.90E-05	4.29E-02	8.12E-05	3.59E+00	3.51E-04	95.8	79.44
5	Step 3.4%	3.99E-04	5.96E-05	1.80E-04	6.84E-05	1.22E-03	6.19E-05	7.52E-02	8.01E-05	6.96E+00	6.50E-04	98.3	90.21
6	Step 3.7%	2.82E-04	7.01E-05	1.32E-04	7.07E-05	1.51E-03	6.96E-05	1.04E-01	1.08E-04	9.77E+00	7.34E-03	99.1	92.40
7	Step 4.0%	2.19E-04	6.77E-05	1.26E-04	7.09E-05	1.65E-03	6.18E-05	1.07E-01	9.78E-05	1.01E+01	1.11E-03	99.3	93.29
8	Step 4.3%	2.24E-04	4.95E-05	9.65E-05	6.74E-05	1.59E-03	6.80E-05	1.05E-01	8.32E-05	1.00E+01	1.13E-03	99.3	93.98
9	Step 4.6%	2.12E-04	5.99E-05	1.24E-04	7.73E-05	1.38E-03	5.91E-05	9.05E-02	8.01E-05	8.73E+00	8.64E-04	99.3	94.83
10	Step 4.9%	2.11E-04	5.25E-05	1.96E-04	6.54E-05	1.01E-03	5.86E-05	6.56E-02	7.80E-05	6.39E+00	9.75E-04	99.0	95.57
11	Step 5.3%	1.63E-04	5.90E-05	1.26E-04	7.55E-05	8.63E-04	6.85E-05	5.88E-02	8.18E-05	5.75E+00	8.21E-04	99.1	95.98
12	Step 6.0%	1.53E-04	7.28E-05	9.00E-05	7.90E-05	5.96E-04	6.52E-05	4.12E-02	8.33E-05	4.02E+00	5.16E-04	98.8	95.69
13	Step 7.0%	1.82E-04	5.88E-05	1.41E-04	8.13E-05	7.83E-04	6.12E-05	4.63E-02	7.90E-05	4.55E+00	5.42E-04	98.8	96.30
14	Step 8.0%	1.87E-04	6.11E-05	1.26E-04	7.46E-05	1.21E-03	6.51E-05	7.72E-02	8.03E-05	7.50E+00	7.43E-04	99.2	95.62
15	Step 9.0%	2.26E-04	7.29E-05	1.88E-04	7.40E-05	1.81E-03	7.30E-05	1.19E-01	8.92E-05	1.17E+01	1.48E-03	99.4	96.80
16	Step 10.0%	2.08E-04	7.10E-05	2.64E-04	6.74E-05	2.31E-03	7.28E-05	1.57E-01	1.04E-04	1.53E+01	2.78E-03	99.6	96.31
17	Step 10.5%	1.97E-04	5.65E-05	1.77E-04	7.14E-05	1.51E-03	6.48E-05	1.04E-01	8.23E-05	1.00E+01	1.47E-03	99.4	95.42
18	Step 11.0%	1.77E-04	6.96E-05	2.18E-04	6.92E-05	1.19E-03	6.50E-05	7.97E-02	8.53E-05	7.71E+00	1.26E-03	99.3	95.19
19	Step 12.0%	1.23E-04	6.20E-05	9.26E-05	8.14E-05	1.18E-03	6.42E-05	8.11E-02	9.69E-05	7.83E+00	6.41E-04	99.5	95.17
20	Step 14.0%	7.49E-05	5.23E-05	1.18E-04	6.91E-05	1.61E-03	6.74E-05	1.15E-01	8.12E-05	1.11E+01	1.12E-03	99.8	95.09
21	Step 18.0%	9.65E-05	5.94E-05	6.87E-05	7.18E-05	9.50E-04	5.40E-05	6.36E-02	7.90E-05	6.10E+00	6.03E-04	99.5	94.59

Step 25.0%	1.37E-04	7.07E-05	1.19E-04	7.29E-05	1.21E-03	6.41E-05	8.23E-02	8.78E-05	7.93E+00	6.51E-04	99.5	94.93
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Sample: GW25

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2570

Material: 2.5 mg Bt

Irradiation: FGA008P5H3 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 47:28.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.35E-06 f-value Err: 1.75E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2570: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 Step 2.0%	3.57E-04	6.42E-05	4.05E-05	7.80E-05	1.68E-04	6.62E-05	2.29E-03	7.68E-05	1.87E-01	3.90E-04	41.7	33.83
2 Step 2.5%	4.14E-04	5.50E-05	1.11E-05	7.09E-05	1.68E-04	6.30E-05	7.54E-03	7.39E-05	5.12E-01	2.24E-04	75.3	50.71
3 Step 2.8%	3.50E-04	5.33E-05	3.14E-06	7.56E-05	2.95E-04	6.24E-05	1.49E-02	7.10E-05	1.11E+00	2.52E-04	90.3	66.67
4 Step 3.1%	4.45E-04	7.16E-05	6.58E-05	6.35E-05	4.77E-04	7.18E-05	2.90E-02	7.17E-05	2.39E+00	3.50E-04	94.3	76.94
5 Step 3.4%	4.43E-04	4.48E-05	2.96E-05	6.98E-05	8.54E-04	6.13E-05	6.10E-02	7.44E-05	5.44E+00	5.98E-04	97.5	86.10
6 Step 3.7%	4.67E-04	5.39E-05	1.17E-04	7.26E-05	1.49E-03	6.85E-05	1.08E-01	9.70E-05	9.96E+00	8.55E-04	98.6	90.00
7 Step 4.0%	2.43E-04	5.13E-05	9.79E-05	6.68E-05	1.50E-03	6.57E-05	1.13E-01	8.15E-05	1.06E+01	8.86E-04	99.3	92.62
8 Step 4.3%	2.55E-04	6.31E-05	8.93E-05	7.10E-05	1.79E-03	6.10E-05	1.34E-01	1.01E-04	1.27E+01	1.49E-03	99.4	93.36
9 Step 4.6%	2.15E-04	5.92E-05	7.56E-05	7.16E-05	1.81E-03	6.82E-05	1.35E-01	8.60E-05	1.28E+01	1.22E-03	99.5	93.81
10 Step 4.9%	1.08E-04	5.62E-05	2.67E-05	6.80E-05	2.28E-03	7.45E-05	1.65E-01	9.87E-05	1.58E+01	2.06E-03	99.8	94.37
11 Step 5.2%	1.19E-04	5.57E-05	4.25E-05	6.92E-05	1.57E-03	6.73E-05	1.10E-01	8.14E-05	1.05E+01	1.56E-03	99.7	94.14
12 Step 5.7%	1.30E-04	5.93E-05	6.03E-05	7.34E-05	1.52E-03	5.82E-05	1.11E-01	8.88E-05	1.06E+01	1.53E-03	99.6	94.18
13 Step 6.3%	1.20E-04	5.23E-05	1.20E-04	7.71E-05	1.16E-03	6.49E-05	8.34E-02	7.92E-05	7.95E+00	1.02E-03	99.5	93.99
14 Step 7.1%	8.54E-05	6.26E-05	6.96E-05	6.01E-05	1.02E-03	6.71E-05	7.42E-02	8.93E-05	7.08E+00	7.35E-04	99.6	94.16
15 Step 8.1%	1.34E-04	5.82E-05	1.01E-04	6.77E-05	1.07E-03	6.69E-05	7.89E-02	8.68E-05	7.54E+00	4.24E-03	99.5	94.16
16 Step 9.1%	1.22E-04	5.80E-05	1.49E-04	7.30E-05	1.30E-03	6.52E-05	9.49E-02	8.05E-05	9.11E+00	8.80E-04	99.6	94.73
17 Step 10.0%	1.86E-04	5.28E-05	1.79E-04	6.81E-05	1.98E-03	6.41E-05	1.47E-01	1.06E-04	1.41E+01	1.17E-03	99.6	95.02
18 Step 10.7%	1.66E-04	4.73E-05	1.97E-04	6.19E-05	2.70E-03	6.94E-05	1.97E-01	9.64E-05	1.90E+01	1.26E-03	99.7	95.21
19 Step 11.3%	1.46E-04	5.47E-05	8.91E-05	7.34E-05	2.84E-03	6.34E-05	2.08E-01	1.10E-04	2.00E+01	2.04E-03	99.8	95.04
20 Step 11.8%	1.10E-04	4.90E-05	1.54E-04	7.27E-05	2.14E-03	6.70E-05	1.57E-01	9.23E-05	1.50E+01	1.92E-03	99.8	94.74
21 Step 12.5%	1.40E-04	5.05E-05	1.03E-04	7.59E-05	2.53E-03	6.68E-05	1.91E-01	9.88E-05	1.83E+01	1.94E-03	99.8	94.85
22 Step 13.3%	1.40E-04	5.70E-05	1.12E-04	6.43E-05	2.04E-03	6.79E-05	1.53E-01	8.55E-05	1.46E+01	1.82E-03	99.7	94.69
23 Step 14.5%	1.59E-04	5.00E-05	1.43E-04	6.81E-05	2.03E-03	6.30E-05	1.50E-01	8.09E-05	1.43E+01	1.28E-03	99.7	94.51
24 Step 18.5%	8.82E-05	1.15E-04	7.40E-05	1.11E-04	3.85E-03	1.04E-04	2.95E-01	1.50E-04	2.83E+01	5.55E-03	99.9	94.94
25 Step 25.0%	1.32E-04	5.37E-05	9.31E-05	6.65E-05	1.68E-03	5.93E-05	1.22E-01	9.89E-05	1.17E+01	1.72E-03	99.7	94.47

Sample: GW27

Project: Tian Shan
 Owner: Lothar_Kaessner

Exp-Nr: 4183

Material: 2.59 mg Bt

		Irradiation:	FGA010P2H6 (End date: 2011-11-23 19:24:00.0)										
		Measurement	I 36:56.0										
		Device:	CO2-Laser										
		Air:	2.96E+02										
		J-Value:	4.32E-03										
		J-Value Error:	1.58E-05										
		f-value:	9.93E-01										
		f-value Err:	3.40E-04										
		Reference Standard(s):	FCT 28.305 ± 0.036 Ma										
4183: Blank corrected intensity intercepts		36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	2%	9.90E-04	4.08E-05	0.00E+00	5.08E-05	2.27E-04	4.71E-05	1.15E-03	4.56E-05	3.40E-01	3.93E-04	11.5	33.71
2	2.50%	8.88E-04	4.95E-05	0.00E+00	3.84E-05	4.47E-04	4.29E-05	1.01E-02	7.07E-05	3.98E-01	6.30E-04	32.2	12.50
3	3%	9.73E-04	4.23E-05	0.00E+00	4.55E-05	1.49E-03	5.81E-05	4.89E-02	1.28E-04	1.13E+00	2.50E-03	73.9	16.95
4	3.80%	1.56E-03	4.60E-05	0.00E+00	4.93E-05	6.19E-03	5.85E-05	2.42E-01	4.36E-04	5.62E+00	1.14E-02	91.6	21.09
5	4.50%	1.11E-03	4.79E-05	0.00E+00	5.61E-05	9.16E-03	6.02E-05	3.70E-01	1.16E-03	8.65E+00	2.84E-02	96.1	22.28
6	4.90%	5.28E-04	4.65E-05	0.00E+00	5.25E-05	7.75E-03	5.71E-05	3.28E-01	4.74E-04	7.66E+00	1.18E-02	97.9	22.65
7	5.20%	2.63E-04	4.88E-05	0.00E+00	5.30E-05	5.38E-03	4.74E-05	2.34E-01	4.24E-04	5.51E+00	1.06E-02	98.5	23.04
8	5.50%	1.84E-04	3.79E-05	0.00E+00	4.91E-05	4.84E-03	5.12E-05	2.09E-01	2.96E-04	4.91E+00	7.96E-03	98.9	23.00
9	5.80%	1.14E-04	4.54E-05	1.93E-05	5.01E-05	3.93E-03	4.45E-05	1.73E-01	3.30E-04	4.07E+00	7.81E-03	99.2	23.12
10	6.20%	9.36E-05	3.71E-05	9.74E-06	5.31E-05	3.45E-03	5.31E-05	1.53E-01	2.72E-04	3.62E+00	6.27E-03	99.2	23.29
11	6.70%	9.15E-05	4.74E-05	7.43E-06	5.25E-05	2.98E-03	4.72E-05	1.34E-01	2.12E-04	3.17E+00	5.42E-03	99.1	23.27
12	7.40%	1.07E-04	3.97E-05	0.00E+00	5.13E-05	3.43E-03	5.00E-05	1.55E-01	2.58E-04	3.65E+00	6.48E-03	99.1	23.18
13	8.20%	1.41E-04	4.16E-05	1.57E-05	4.53E-05	3.94E-03	4.97E-05	1.74E-01	2.47E-04	3.99E+00	6.14E-03	98.9	22.51
14	9%	1.41E-04	4.21E-05	0.00E+00	5.79E-05	4.33E-03	4.28E-05	1.83E-01	2.19E-04	3.93E+00	4.76E-03	98.9	20.99
15	9.80%	1.49E-04	4.36E-05	1.65E-06	3.73E-05	5.60E-03	4.77E-05	2.30E-01	5.26E-04	4.71E+00	1.11E-02	99.0	20.09
16	10.50%	1.55E-04	4.63E-05	3.23E-06	4.93E-05	6.12E-03	4.67E-05	2.50E-01	4.46E-04	5.06E+00	9.47E-03	99.1	19.88
17	11.10%	1.22E-04	4.50E-05	0.00E+00	4.99E-05	5.95E-03	4.89E-05	2.47E-01	4.40E-04	5.10E+00	9.89E-03	99.3	20.33
18	11.70%	1.26E-04	4.72E-05	2.28E-06	4.35E-05	5.40E-03	4.83E-05	2.32E-01	4.71E-04	4.99E+00	1.14E-02	99.2	21.16
19	12.50%	1.46E-04	4.12E-05	0.00E+00	5.00E-05	6.30E-03	4.45E-05	2.72E-01	5.11E-04	5.97E+00	1.12E-02	99.3	21.61
20	13.50%	1.26E-04	4.17E-05	0.00E+00	4.93E-05	6.22E-03	5.36E-05	2.77E-01	4.46E-04	6.38E+00	1.03E-02	99.4	22.68
21	15%	8.73E-05	4.20E-05	0.00E+00	4.86E-05	6.12E-03	5.10E-05	2.80E-01	6.62E-04	6.57E+00	1.69E-02	99.6	23.19
22	20%	1.43E-04	4.25E-05	1.80E-05	4.88E-05	8.18E-03	4.70E-05	3.79E-01	5.90E-04	9.15E+00	1.26E-02	99.5	23.84
23	25%	3.32E-05	4.11E-05	0.00E+00	4.19E-05	2.41E-03	4.21E-05	1.13E-01	1.96E-04	2.86E+00	4.74E-03	99.6	24.95

Sample: GW28

Project: Pamir_Gissar Arc
 Owner: Lothar_Kaessner

Exp-Nr: 2573

Irradiation: FGA008P5H4 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 21:48.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03

f-value: 9.92E-01

All Errors are 1s!

Material: 2.25 mg Bt

		J-Value Error: 4.35E-06								f-value Err: 1.75E-04				Fit model: quadratic		
		Reference Standard(s): FCT 28.305 ± 0.036 Ma														
2573: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)				
1	Step 2.0%	4.98E-04	6.58E-05	3.35E-05	1.08E-04	2.45E-04	8.42E-05	2.93E-03	8.12E-05	1.80E-01	4.42E-04	15.5	9.44			
2	Step 2.5%	8.22E-04	5.49E-05	4.14E-06	6.75E-05	2.82E-04	6.13E-05	8.92E-03	6.05E-05	5.36E-01	2.17E-04	53.2	31.64			
3	Step 2.8%	7.56E-04	5.65E-05	2.90E-05	6.46E-05	3.95E-04	6.30E-05	1.66E-02	6.93E-05	1.14E+00	2.84E-04	79.7	54.17			
4	Step 3.1%	8.14E-04	5.19E-05	0	7.08E-05	5.47E-04	6.29E-05	2.48E-02	7.33E-05	1.79E+00	2.99E-04	86.1	61.53			
5	Step 3.4%	9.75E-04	5.86E-05	0	6.91E-05	7.46E-04	5.43E-05	3.79E-02	8.15E-05	2.98E+00	4.35E-04	90.0	70.09			
6	Step 3.7%	1.04E-03	7.00E-05	4.44E-05	7.03E-05	1.20E-03	6.05E-05	5.93E-02	8.28E-05	5.01E+00	4.85E-03	93.7	78.42			
7	Step 4.0%	9.62E-04	6.16E-05	5.75E-05	7.80E-05	1.29E-03	5.95E-05	7.37E-02	9.17E-05	6.56E+00	8.31E-04	95.5	84.28			
8	Step 4.3%	7.85E-04	6.82E-05	8.94E-05	7.06E-05	1.42E-03	7.96E-05	8.13E-02	8.62E-05	7.43E+00	6.88E-04	96.8	87.65			
9	Step 4.6%	6.20E-04	6.24E-05	2.21E-05	7.27E-05	1.38E-03	5.99E-05	7.66E-02	8.21E-05	7.04E+00	6.83E-04	97.3	88.72			
10	Step 4.9%	5.45E-04	5.70E-05	7.62E-05	6.78E-05	1.34E-03	6.85E-05	7.42E-02	7.64E-05	6.84E+00	7.37E-04	97.6	88.99			
11	Step 5.3%	4.78E-04	5.57E-05	9.86E-05	7.18E-05	1.20E-03	6.06E-05	7.17E-02	9.43E-05	6.70E+00	4.89E-03	97.8	90.55			
12	Step 5.8%	3.99E-04	5.54E-05	4.46E-05	6.56E-05	1.13E-03	6.61E-05	6.39E-02	6.94E-05	6.02E+00	4.90E-04	98.0	91.45			
13	Step 6.6%	3.86E-04	6.02E-05	3.08E-05	6.51E-05	9.26E-04	6.30E-05	5.45E-02	8.45E-05	5.14E+00	5.18E-04	97.7	91.43			
14	Step 7.4%	2.85E-04	5.81E-05	5.22E-05	6.43E-05	7.94E-04	5.94E-05	4.69E-02	8.02E-05	4.42E+00	3.75E-04	98.0	91.63			
15	Step 8.8%	5.70E-04	6.15E-05	1.32E-04	7.09E-05	1.52E-03	5.96E-05	8.94E-02	9.53E-05	8.49E+00	9.74E-04	98.0	92.19			
16	Step 10.0%	7.97E-04	6.09E-05	2.32E-04	7.05E-05	2.60E-03	5.80E-05	1.58E-01	8.95E-05	1.50E+01	2.08E-03	98.4	92.59			
17	Step 10.8%	7.13E-04	5.47E-05	2.00E-04	6.98E-05	2.63E-03	7.35E-05	1.63E-01	9.43E-05	1.53E+01	1.91E-03	98.6	92.01			
18	Step 11.4%	5.44E-04	5.70E-05	2.05E-04	7.20E-05	2.30E-03	5.88E-05	1.47E-01	8.90E-05	1.38E+01	1.32E-03	98.8	91.73			
19	Step 12.0%	3.91E-04	5.33E-05	2.34E-04	6.77E-05	1.89E-03	6.04E-05	1.17E-01	8.74E-05	1.10E+01	9.55E-04	98.9	91.99			
20	Step 13.0%	4.62E-04	5.32E-05	2.86E-04	6.45E-05	2.47E-03	5.78E-05	1.61E-01	8.55E-05	1.52E+01	1.89E-03	99.1	92.81			
21	Step 14.0%	2.70E-04	6.45E-05	2.80E-04	7.74E-05	1.94E-03	6.37E-05	1.23E-01	8.37E-05	1.17E+01	1.61E-03	99.3	93.26			
22	Step 16.0%	2.74E-04	5.53E-05	1.64E-04	6.30E-05	2.08E-03	6.84E-05	1.35E-01	8.38E-05	1.28E+01	1.65E-03	99.3	93.45			
23	Step 19.0%	1.63E-04	5.49E-05	7.61E-05	6.49E-05	1.06E-03	5.48E-05	6.68E-02	7.84E-05	6.30E+00	6.96E-04	99.2	92.78			
24	Step 25.0%	1.37E-04	1.53E-04	1.55E-04	4.73E-04	1.36E-04	2.40E-02	1.49E-04	2.24E+00	3.12E-04	98.1	90.67				

Sample: GW30

Project: Pamir_Gissar Arc
Owner: Lothar_Kaessner

Exp-Nr: 2584

Material: 2.9 mg Bt

Irradiation: FGA008P5H5 (End date: 2010-10-27 06:47:00.0)

Measurement Date: 51:25.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.81E-03 f-value: 9.92E-01

All Errors are 1s!

J-Value Error: 4.35E-06 f-value Err: 1.74E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2584: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)	
1	Step 2.0%	7.28E-04	1.09E-04	1.58E-04	1.16E-04	1.89E-04	9.21E-05	4.99E-03	1.23E-04	2.41E-01	2.58E-04	7.9	3.76

2	Step 2.5%	3.24E-03	9.16E-05	3.15E-04	1.11E-04	8.78E-04	8.35E-05	1.69E-02	1.11E-04	1.38E+00	2.28E-04	28.3	22.95
3	Step 2.8%	3.42E-03	8.03E-05	1.86E-04	7.99E-05	9.87E-04	6.83E-05	2.79E-02	8.28E-05	1.85E+00	4.01E-04	43.8	28.85
4	Step 3.1%	3.74E-03	8.54E-05	4.16E-04	8.77E-05	1.24E-03	7.78E-05	4.23E-02	9.04E-05	2.76E+00	3.31E-04	58.7	37.95
5	Step 3.4%	3.74E-03	8.73E-05	4.12E-04	9.01E-05	1.46E-03	6.93E-05	5.73E-02	9.88E-05	3.82E+00	4.32E-04	70.1	46.33
6	Step 3.7%	3.73E-03	8.01E-05	4.88E-04	9.54E-05	1.89E-03	7.63E-05	8.85E-02	1.07E-04	6.61E+00	8.99E-04	82.8	61.30
7	Step 4.0%	2.77E-03	7.15E-05	3.53E-04	7.68E-05	1.72E-03	7.35E-05	9.03E-02	9.20E-05	7.13E+00	7.73E-04	88.2	69.02
8	Step 4.3%	2.15E-03	9.10E-05	3.69E-04	1.03E-04	1.70E-03	9.29E-05	9.88E-02	1.03E-04	8.31E+00	8.84E-04	92.1	76.82
9	Step 4.6%	1.46E-03	7.62E-05	3.09E-04	8.16E-05	1.60E-03	6.97E-05	1.02E-01	1.01E-04	9.18E+00	1.23E-03	95.2	84.61
10	Step 4.9%	1.04E-03	6.82E-05	2.73E-04	7.48E-05	1.39E-03	7.61E-05	8.56E-02	9.59E-05	7.89E+00	9.42E-04	96.0	87.77
11	Step 5.3%	8.62E-04	7.24E-05	1.65E-04	7.14E-05	1.20E-03	7.33E-05	7.60E-02	8.68E-05	7.20E+00	6.77E-04	96.4	90.47
12	Step 5.9%	7.70E-04	7.52E-05	2.50E-04	7.21E-05	9.50E-04	7.26E-05	6.29E-02	9.70E-05	6.04E+00	8.65E-04	96.1	91.44
13	Step 7.0%	8.72E-04	7.74E-05	2.87E-04	8.54E-05	9.84E-04	6.73E-05	6.43E-02	1.03E-04	6.15E+00	1.05E-03	95.7	90.72
14	Step 8.2%	1.13E-03	8.52E-05	3.18E-04	7.95E-05	1.36E-03	7.33E-05	8.78E-02	9.17E-05	8.46E+00	1.21E-03	95.9	91.65
15	Step 9.2%	1.39E-03	7.75E-05	5.95E-04	7.82E-05	1.74E-03	7.43E-05	1.14E-01	9.18E-05	1.11E+01	1.43E-03	96.2	92.54
16	Step 10.0%	1.44E-03	7.28E-05	7.37E-04	7.26E-05	1.99E-03	7.11E-05	1.37E-01	1.06E-04	1.31E+01	1.88E-03	96.7	91.66
17	Step 10.7%	1.08E-03	7.32E-05	6.47E-04	8.21E-05	1.77E-03	7.80E-05	1.22E-01	1.06E-04	1.15E+01	1.09E-03	97.1	90.78
18	Step 11.4%	8.90E-04	8.44E-05	7.14E-04	8.04E-05	1.77E-03	7.47E-05	1.25E-01	9.42E-05	1.18E+01	1.62E-03	97.7	91.34
19	Step 12.2%	6.42E-04	7.21E-05	5.21E-04	7.44E-05	1.49E-03	7.72E-05	1.12E-01	9.76E-05	1.06E+01	1.64E-03	98.2	91.75
20	Step 13.2%	3.62E-04	7.39E-05	3.11E-04	8.44E-05	1.21E-03	8.19E-05	9.23E-02	1.12E-04	8.77E+00	1.19E-03	98.7	93.05
21	Step 15.0%	2.63E-04	7.64E-05	4.30E-04	8.03E-05	1.11E-03	6.97E-05	8.13E-02	9.30E-05	7.80E+00	8.93E-04	99.0	94.14
22	Step 19.0%	2.56E-04	7.49E-05	2.74E-04	7.36E-05	1.09E-03	7.58E-05	7.77E-02	9.75E-05	7.46E+00	1.11E-03	99.0	94.27
23	Step 25.0%	2.23E-04	8.13E-05	2.36E-04	9.20E-05	6.82E-04	7.78E-05	4.00E-02	9.27E-05	3.80E+00	6.02E-04	98.2	92.49

Sample: 96TS1

Project: Tian Shan
Owner: Lothar

Exp-Nr: 2734

Material: 2.35 mg Bt

Irradiation: FGA008P2H4 (End date: 2010-10-27 06:47:00.0)

Measurement I 14:33.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 0.001817 f-value: 0.991408

All Errors are 1s!

J-Value Error: 0.000005 f-value Err: 0.000108

Fit model: linear

Reference Standard(s): FCT 28.305 ± 0.036 Ma

2734: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 2%	3.05E-04	4.22E-05	2.68E-05	5.99E-05	1.50E-04	4.52E-05	5.61E-03	5.64E-05	1.97E-01	1.95E-04	5.28E+01	1.84E+01
2 2.50%	3.40E-04	4.43E-05	1.34E-04	5.75E-05	3.94E-04	5.26E-05	1.88E-02	7.26E-05	4.63E-01	3.31E-04	7.77E+01	1.90E+01
3 2.80%	2.49E-04	4.39E-05	1.07E-04	4.38E-05	6.11E-04	4.47E-05	3.52E-02	7.23E-05	8.93E-01	6.56E-04	9.15E+01	2.30E+01
4 3.10%	2.72E-04	4.62E-05	1.24E-04	5.66E-05	8.89E-04	4.88E-05	5.05E-02	6.89E-05	2.14E+00	1.00E-03	9.61E+01	4.04E+01
5 3.40%	2.66E-04	4.69E-05	1.14E-04	4.93E-05	1.04E-03	5.03E-05	6.43E-02	7.29E-05	4.38E+00	7.82E-04	9.82E+01	6.63E+01
6 3.70%	2.44E-04	4.82E-05	1.16E-04	5.72E-05	1.32E-03	4.77E-05	8.26E-02	7.49E-05	7.09E+00	8.23E-04	9.90E+01	8.41E+01

7	4%	1.43E-04	4.10E-05	8.94E-05	5.95E-05	1.63E-03	5.05E-05	1.05E-01	7.86E-05	9.40E+00	6.04E-04	9.95E+01	8.87E+01
8	4.30%	9.49E-05	4.00E-05	5.67E-05	4.72E-05	1.48E-03	5.37E-05	9.67E-02	7.51E-05	8.76E+00	6.46E-04	9.97E+01	8.94E+01
9	4.60%	9.75E-05	4.42E-05	2.15E-05	4.98E-05	1.33E-03	5.41E-05	8.62E-02	6.80E-05	7.85E+00	3.89E-04	9.96E+01	8.98E+01
10	5%	4.92E-05	4.61E-05	5.84E-05	6.06E-05	1.16E-03	4.80E-05	7.48E-02	6.81E-05	6.90E+00	6.58E-04	9.98E+01	9.11E+01
11	5.40%	5.07E-05	4.32E-05	4.61E-05	5.82E-05	1.05E-03	4.78E-05	7.02E-02	8.02E-05	6.57E+00	5.30E-04	9.98E+01	9.25E+01
12	5.90%	2.25E-05	4.48E-05	5.16E-05	5.46E-05	8.47E-04	4.54E-05	5.37E-02	6.56E-05	5.16E+00	8.60E-04	9.99E+01	9.49E+01
13	6.40%	7.01E-05	4.42E-05	7.03E-05	5.11E-05	9.69E-04	4.60E-05	6.09E-02	8.01E-05	5.92E+00	1.59E-03	9.96E+01	9.61E+01
14	7.40%	3.88E-05	4.29E-05	9.59E-05	5.33E-05	7.84E-04	4.57E-05	4.91E-02	8.43E-05	4.82E+00	5.32E-03	9.98E+01	9.68E+01
15	8%	6.67E-05	4.75E-05	8.96E-05	5.11E-05	7.22E-04	4.62E-05	4.57E-02	7.54E-05	4.43E+00	3.98E-04	9.95E+01	9.56E+01
16	8.60%	4.20E-05	4.04E-05	1.16E-04	5.02E-05	8.62E-04	5.22E-05	5.65E-02	6.09E-05	5.45E+00	5.70E-04	9.98E+01	9.52E+01
17	9.30%	3.03E-05	4.58E-05	1.35E-04	5.68E-05	1.26E-03	4.21E-05	8.27E-02	6.73E-05	7.91E+00	8.77E-04	9.99E+01	9.46E+01
18	10%	2.72E-05	4.32E-05	1.34E-04	5.46E-05	1.44E-03	5.23E-05	9.60E-02	7.38E-05	9.06E+00	1.13E-03	9.99E+01	9.33E+01
19	10.60%	1.55E-05	4.37E-05	1.76E-04	5.26E-05	1.47E-03	5.62E-05	9.76E-02	8.82E-05	9.08E+00	5.74E-04	1.00E+02	9.21E+01
20	11.20%	3.22E-05	4.61E-05	2.15E-04	5.40E-05	1.28E-03	5.12E-05	8.59E-02	6.78E-05	7.90E+00	5.49E-04	9.99E+01	9.09E+01
21	11.80%	2.09E-06	4.36E-05	6.09E-05	5.42E-05	6.21E-04	5.13E-05	4.19E-02	6.97E-05	3.82E+00	4.19E-04	1.00E+02	9.04E+01
22	12.60%	9.31E-06	4.75E-05	9.58E-05	5.17E-05	6.10E-04	4.45E-05	4.07E-02	5.85E-05	3.71E+00	2.68E-04	9.99E+01	9.01E+01
23	13.50%	0	4.35E-05	1.29E-04	5.65E-05	5.86E-04	5.01E-05	4.03E-02	6.54E-05	3.67E+00	1.13E-03	1.00E+02	9.01E+01
24	15%	0	5.21E-05	5.04E-05	5.36E-05	1.88E-04	4.83E-05	1.34E-02	6.73E-05	1.21E+00	2.92E-04	1.00E+02	8.93E+01
25	17%	0	3.86E-05	4.33E-05	4.76E-05	1.80E-04	4.71E-05	1.37E-02	6.62E-05	1.23E+00	3.08E-04	1.00E+02	8.90E+01
26	20%	0	4.30E-05	1.60E-04	5.40E-05	3.75E-04	4.45E-05	2.61E-02	7.10E-05	2.37E+00	3.34E-04	1.00E+02	9.00E+01

Sample: 96TS1a

Project: Tian Shan

Owner: Lothar

Exp-Nr: 4724

Material: 3.08 mg Bt

Irradiation: FGA012P2H2 (End date: 2012-10-30 18:24:00.0)

Measurement I 45:41.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 3.54E-03 f-value: 9.95E-01

All Errors are 1s!

J-Value Error: 5.28E-06 f-value Err: 3.42E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

4724: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)	
1	Step 3.0%	7.17E-03	6.21E-05	2.86E-03	7.27E-05	2.61E-03	6.68E-05	3.36E-02	9.59E-05	2.44E+00	4.99E-03	11.5	8.36
2	Step 4.5%	7.04E-03	6.16E-05	4.56E-03	7.50E-05	5.73E-03	6.77E-05	1.63E-01	5.15E-04	6.84E+00	2.23E-02	69.0	28.77
3	Step 5.5%	3.22E-03	6.01E-05	3.23E-03	7.70E-05	6.89E-03	6.77E-05	2.59E-01	6.81E-04	1.20E+01	3.05E-02	91.9	42.45
4	Step 6.2%	1.46E-03	5.79E-05	2.90E-03	6.81E-05	7.67E-03	7.23E-05	3.14E-01	7.74E-04	1.44E+01	3.69E-02	96.9	44.34
5	Step 6.9%	1.03E-03	5.41E-05	3.02E-03	6.93E-05	8.07E-03	7.25E-05	3.41E-01	1.22E-03	1.58E+01	5.97E-02	98.0	45.15
6	Step 7.6%	8.99E-04	5.47E-05	3.18E-03	7.07E-05	7.19E-03	6.75E-05	3.10E-01	8.53E-04	1.44E+01	3.89E-02	98.1	45.49
7	Step 8.3%	1.39E-03	6.66E-05	4.08E-03	7.10E-05	7.37E-03	7.19E-05	3.03E-01	7.52E-04	1.44E+01	3.52E-02	97.1	45.96
8	Step 9.0%	1.19E-03	6.33E-05	4.52E-03	6.80E-05	6.59E-03	7.49E-05	2.58E-01	8.56E-04	1.24E+01	4.27E-02	97.1	46.37

9	Step 9.7%	1.08E-03	5.58E-05	6.64E-03	8.07E-05	7.49E-03	7.47E-05	2.92E-01	9.50E-04	1.39E+01	4.52E-02	97.7	46.36
10	Step 10.4%	8.16E-04	6.03E-05	6.97E-03	7.84E-05	6.55E-03	7.59E-05	2.61E-01	8.19E-04	1.23E+01	3.90E-02	98.0	46.01
11	Step 11.1%	4.97E-04	5.25E-05	6.55E-03	7.86E-05	5.17E-03	6.60E-05	2.11E-01	6.72E-04	9.86E+00	3.27E-02	98.5	45.80
12	Step 11.8%	3.37E-04	6.12E-05	6.43E-03	8.50E-05	4.35E-03	8.12E-05	1.84E-01	5.33E-04	8.53E+00	2.65E-02	98.8	45.58
13	Step 12.5%	2.02E-04	6.72E-05	5.35E-03	7.08E-05	3.19E-03	6.82E-05	1.36E-01	3.28E-04	6.27E+00	1.59E-02	99.0	45.30
14	Step 13.2%	1.04E-04	5.52E-05	2.15E-03	7.55E-05	1.36E-03	6.64E-05	6.13E-02	1.89E-04	2.81E+00	7.57E-03	98.9	45.10
15	Step 13.9%	8.29E-05	6.19E-05	1.92E-03	7.66E-05	1.12E-03	6.59E-05	4.95E-02	1.36E-04	2.27E+00	4.82E-03	98.9	45.08
16	Step 14.6%	6.90E-05	5.81E-05	2.06E-03	7.29E-05	9.32E-04	6.53E-05	4.10E-02	1.40E-04	1.88E+00	4.50E-03	98.9	45.06
17	Step 15.3%	4.79E-05	5.86E-05	2.11E-03	7.57E-05	8.56E-04	6.90E-05	3.80E-02	1.02E-04	1.74E+00	3.01E-03	99.2	45.26
18	Step 16.0%	7.25E-05	6.13E-05	2.33E-03	7.42E-05	8.37E-04	7.10E-05	3.50E-02	1.00E-04	1.61E+00	3.17E-03	98.7	45.01
19	Step 16.7%	6.71E-05	6.16E-05	2.74E-03	7.87E-05	8.18E-04	6.47E-05	3.62E-02	1.02E-04	1.67E+00	3.83E-03	98.8	45.20
20	Step 17.4%	2.48E-05	5.46E-05	3.18E-03	7.35E-05	6.34E-04	6.67E-05	2.75E-02	1.01E-04	1.26E+00	3.50E-03	99.5	45.49
21	Step 18.1%	5.76E-05	5.62E-05	3.81E-03	6.90E-05	7.72E-04	6.65E-05	2.98E-02	1.27E-04	1.36E+00	5.57E-03	98.8	45.03
22	Step 18.8%	6.98E-05	6.41E-05	2.91E-03	7.69E-05	4.85E-04	6.44E-05	1.91E-02	9.81E-05	8.77E-01	2.56E-03	97.7	44.53
23	Step 19.5%	0	5.64E-05	2.03E-03	7.23E-05	3.54E-04	6.89E-05	1.35E-02	9.67E-05	6.25E-01	2.45E-03	100.1	45.94
24	Step 20.2%	6.60E-05	5.33E-05	2.67E-03	7.12E-05	3.04E-04	7.08E-05	1.47E-02	8.51E-05	6.80E-01	2.39E-03	97.2	44.73
25	Step 20.9%	6.49E-05	4.95E-05	4.08E-03	7.39E-05	3.59E-04	6.92E-05	1.50E-02	8.24E-05	6.94E-01	2.50E-03	97.3	44.68
26	Step 22.0%	5.50E-05	5.32E-05	2.56E-03	7.67E-05	2.77E-04	6.60E-05	8.35E-03	8.56E-05	3.88E-01	2.18E-03	95.9	44.39
27	Step 25.0%	3.83E-05	5.75E-05	6.39E-03	8.48E-05	3.82E-04	6.30E-05	1.43E-02	1.15E-04	6.53E-01	4.72E-03	98.5	44.80
28	Step 28.0%	6.71E-05	5.32E-05	8.79E-04	6.83E-05	7.56E-05	6.14E-05	2.22E-03	7.36E-05	1.02E-01	1.21E-03	80.4	36.95

Sample: 96TS1a

Project: Tian Shan

Owner: Lothar

Exp-Nr: 4714

Material: 3.45 mg Kfs

Irradiation: FGA012P2H4 (End date: 2012-10-30 18:24:00.0)

Measurement I 56:59.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 3.54E-03 f-value: 9.95E-01

All Errors are 1s!

J-Value Error: 5.28E-06 f-value Err: 3.42E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

4714: Blank corrected intensity intercept	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 Step 2.0%	7.74E-04	6.09E-05	2.75E-05	7.27E-05	2.66E-04	6.58E-05	1.90E-04	7.84E-05	2.41E-01	1.37E-03	3.0	38.10
2 Step 3.0%	2.97E-03	6.21E-05	3.75E-03	7.71E-05	1.66E-03	6.25E-05	7.06E-02	1.88E-04	3.21E+00	8.45E-03	72.1	32.58
3 Step 4.0%	2.60E-03	6.63E-05	1.98E-02	9.48E-05	2.45E-03	6.99E-05	1.56E-01	3.60E-04	6.05E+00	1.49E-02	87.1	33.59
4 Step 5.0%	9.31E-04	6.43E-05	1.20E-02	8.40E-05	1.43E-03	5.87E-05	1.09E-01	3.13E-04	4.14E+00	1.19E-02	93.3	35.15
5 Step 6.0%	3.43E-04	6.81E-05	3.03E-03	7.69E-05	7.96E-04	6.63E-05	7.12E-02	2.30E-04	2.59E+00	7.99E-03	96.0	34.74
6 Step 7.0%	4.60E-04	6.08E-05	3.27E-03	6.95E-05	8.73E-04	6.00E-05	6.51E-02	2.05E-04	2.45E+00	7.39E-03	94.4	35.39
7 Step 8.0%	1.04E-03	6.57E-05	4.25E-03	8.12E-05	1.31E-03	6.02E-05	9.33E-02	1.63E-04	3.57E+00	5.64E-03	91.2	34.73
8 Step 9.0%	1.36E-03	6.00E-05	4.56E-03	8.48E-05	1.82E-03	6.46E-05	1.32E-01	3.33E-04	5.15E+00	1.31E-02	92.0	35.73

9	Step 10.0%	2.45E-03	6.15E-05	6.99E-03	7.60E-05	3.57E-03	6.54E-05	2.70E-01	7.33E-04	1.07E+01	3.01E-02	93.1	36.89
10	Step 11.0%	4.76E-03	6.37E-05	1.36E-02	8.78E-05	7.44E-03	7.23E-05	5.25E-01	1.29E-03	2.11E+01	5.35E-02	93.2	37.25
11	Step 12.0%	3.58E-03	6.16E-05	1.08E-02	7.77E-05	5.72E-03	6.10E-05	3.84E-01	1.11E-03	1.56E+01	4.71E-02	93.1	37.61
12	Step 13.0%	4.17E-03	6.79E-05	1.49E-02	8.98E-05	4.82E-03	6.07E-05	2.31E-01	7.45E-04	1.01E+01	3.24E-02	87.5	38.01
13	Step 14.0%	1.71E-03	6.24E-05	8.08E-03	8.67E-05	2.71E-03	6.05E-05	1.58E-01	6.70E-04	6.78E+00	3.06E-02	92.4	39.47
14	Step 15.0%	1.07E-03	6.47E-05	4.67E-03	7.91E-05	2.13E-03	5.87E-05	1.44E-01	3.78E-04	6.05E+00	1.72E-02	94.7	39.58
15	Step 16.0%	1.09E-03	6.10E-05	3.25E-03	6.96E-05	1.76E-03	6.18E-05	1.25E-01	3.43E-04	4.91E+00	1.33E-02	93.3	36.42
16	Step 17.0%	6.65E-04	6.31E-05	2.26E-03	7.70E-05	1.16E-03	6.00E-05	7.63E-02	2.05E-04	3.09E+00	7.72E-03	93.5	37.72
17	Step 18.0%	7.43E-04	6.38E-05	2.93E-03	7.72E-05	1.54E-03	6.22E-05	1.07E-01	2.94E-04	4.38E+00	1.17E-02	94.9	38.62
18	Step 19.0%	5.52E-04	6.29E-05	3.89E-03	6.96E-05	1.18E-03	6.80E-05	7.89E-02	1.93E-04	3.30E+00	7.82E-03	95.0	39.42
19	Step 20.0%	1.79E-04	5.84E-05	2.21E-03	7.65E-05	2.71E-04	5.95E-05	1.73E-02	9.78E-05	7.71E-01	2.58E-03	93.1	41.38
20	Step 24.0%	6.64E-04	6.80E-05	7.07E-03	7.65E-05	8.87E-04	6.74E-05	3.88E-02	1.61E-04	1.80E+00	6.59E-03	89.0	41.17
21	Step 30.0%	3.85E-04	6.80E-05	3.12E-03	7.67E-05	4.42E-04	6.50E-05	2.22E-02	9.65E-05	1.05E+00	2.20E-03	89.1	42.07

Sample: 96TS2

Project: Tian Shan
Owner: Lothar

Exp-Nr: 4716

Material: 3.28 mg Kfs

Irradiation: FGA012P2H5 (End date: 2012-10-30 18:24:00.0)

Measurement I 02:58.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 3.54E-03 f-value: 9.95E-01

J-Value Error: 5.28E-06 f-value Err: 3.42E-04

All Errors are 1s!

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

	4716: Blank corrected intensity intercept	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1	Step 2.0%	9.90E-04	6.14E-05	0	6.56E-05	2.40E-04	6.79E-05	1.72E-04	7.30E-05	2.92E-01	2.31E-03	-2.4	-40.27
2	Step 3.5%	4.78E-03	6.16E-05	8.56E-03	7.60E-05	3.74E-03	7.18E-05	1.91E-01	4.43E-04	7.96E+00	1.86E-02	81.9	34.00
3	Step 5.0%	1.30E-03	5.82E-05	7.80E-03	7.43E-05	2.83E-03	6.48E-05	2.28E-01	4.22E-04	9.09E+00	1.64E-02	95.7	37.86
4	Step 6.5%	2.71E-04	6.47E-05	7.37E-04	6.05E-05	1.25E-03	6.83E-05	1.13E-01	2.29E-04	4.51E+00	8.21E-03	98.2	39.07
5	Step 8.0%	3.99E-04	5.62E-05	5.68E-04	7.26E-05	1.48E-03	6.23E-05	1.32E-01	4.71E-04	5.42E+00	2.09E-02	97.8	39.95
6	Step 9.0%	4.03E-04	6.00E-05	5.04E-04	6.49E-05	1.55E-03	6.05E-05	1.38E-01	3.52E-04	5.70E+00	1.40E-02	97.9	40.12
7	Step 10.0%	7.19E-04	6.10E-05	4.47E-04	6.40E-05	1.95E-03	6.50E-05	1.57E-01	4.83E-04	6.37E+00	1.97E-02	96.6	39.02
8	Step 11.0%	2.97E-03	6.11E-05	1.16E-03	7.42E-05	4.16E-03	6.49E-05	2.99E-01	7.92E-04	1.24E+01	3.47E-02	92.8	38.10
9	Step 12.0%	4.67E-03	6.37E-05	1.21E-03	7.27E-05	6.75E-03	6.47E-05	4.54E-01	1.05E-03	1.89E+01	4.58E-02	92.5	38.25
10	Step 13.0%	2.03E-03	6.38E-05	9.45E-04	7.22E-05	2.73E-03	6.27E-05	1.76E-01	6.21E-04	7.46E+00	2.74E-02	91.8	38.69
11	Step 14.0%	1.24E-03	5.85E-05	4.22E-04	6.24E-05	1.71E-03	6.41E-05	1.15E-01	2.54E-04	4.81E+00	1.01E-02	92.2	38.37
12	Step 15.0%	2.05E-03	6.55E-05	4.66E-04	6.94E-05	3.07E-03	6.79E-05	2.35E-01	5.30E-04	9.81E+00	2.29E-02	93.7	38.90
13	Step 16.0%	1.94E-03	6.06E-05	1.73E-04	7.37E-05	2.40E-03	6.93E-05	1.76E-01	3.14E-04	7.46E+00	1.38E-02	92.1	38.91
14	Step 17.0%	6.71E-04	5.81E-05	2.17E-04	6.42E-05	1.07E-03	6.01E-05	7.50E-02	1.68E-04	3.10E+00	5.87E-03	93.5	38.41
15	Step 18.0%	4.36E-04	6.22E-05	3.29E-04	7.16E-05	5.39E-04	6.25E-05	2.97E-02	1.35E-04	1.34E+00	4.52E-03	90.2	40.32

16	Step 19.0%	3.72E-04	6.12E-05	1.99E-04	6.33E-05	3.28E-04	6.66E-05	1.53E-02	7.91E-05	7.47E-01	1.99E-03	85.0	41.40
17	Step 20.0%	3.35E-04	5.93E-05	1.80E-04	6.10E-05	3.63E-04	6.52E-05	1.59E-02	1.04E-04	7.52E-01	3.34E-03	86.6	40.71

Sample: TS18a

Project: Pamir

Owner: Lothar

Exp-Nr: 1156

Material: 2.780000e+000 mg Bt

Irradiation: FGA004P1H1 (End date: 2009-03-13 11:05:00.0)

Measurement I 11:24.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 1.24E-03 f-value: 9.94E-01

All Errors are 1s!

J-Value Error: 2.30E-06 f-value Err: 2.37E-04

Fit model: linear

Reference Standard(s): FCT 28.305 ± 0.036 Ma

1156: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 2.50%	5.14E-03	4.28E-05	3.52E-04	4.07E-05	1.15E-03	4.18E-05	7.83E-03	5.36E-05	1.91E+00	3.16E-03	1.88E+01	4.55E+01
2 2.80%	3.95E-03	4.52E-05	3.99E-04	4.47E-05	9.86E-04	4.41E-05	1.08E-02	6.08E-05	1.90E+00	6.01E-03	3.73E+01	6.56E+01
3 3%	2.65E-03	4.15E-05	3.13E-04	3.44E-05	7.61E-04	3.83E-05	9.81E-03	5.88E-05	1.60E+00	6.11E-03	4.98E+01	8.07E+01
4 3.20%	2.51E-03	4.64E-05	2.83E-04	4.67E-05	7.27E-04	4.29E-05	1.11E-02	5.51E-05	1.77E+00	4.80E-03	5.71E+01	9.06E+01
5 3.40%	2.82E-03	4.31E-05	3.86E-04	4.59E-05	9.18E-04	4.06E-05	1.55E-02	5.21E-05	2.46E+00	5.60E-03	6.54E+01	1.03E+02
6 3.60%	2.06E-03	4.13E-05	2.81E-04	4.24E-05	7.06E-04	3.84E-05	1.33E-02	6.23E-05	2.10E+00	4.97E-03	7.03E+01	1.11E+02
7 3.80%	2.81E-03	4.62E-05	4.36E-04	3.86E-05	1.07E-03	4.58E-05	2.22E-02	6.73E-05	3.48E+00	8.40E-03	7.56E+01	1.18E+02
8 4%	1.85E-03	4.12E-05	2.94E-04	4.80E-05	7.44E-04	4.39E-05	1.69E-02	5.38E-05	2.65E+00	5.26E-03	7.89E+01	1.23E+02
9 4.20%	1.71E-03	4.02E-05	3.08E-04	4.17E-05	7.92E-04	4.70E-05	1.92E-02	5.38E-05	3.00E+00	5.60E-03	8.28E+01	1.28E+02
10 4.40%	1.73E-03	4.16E-05	3.29E-04	4.28E-05	8.59E-04	3.52E-05	2.25E-02	5.60E-05	3.48E+00	6.52E-03	8.50E+01	1.31E+02
11 4.60%	1.27E-03	4.70E-05	2.37E-04	4.34E-05	6.52E-04	4.08E-05	1.77E-02	5.54E-05	2.74E+00	3.41E-03	8.59E+01	1.32E+02
12 4.80%	1.19E-03	4.10E-05	2.66E-04	4.34E-05	6.65E-04	3.81E-05	1.87E-02	5.58E-05	2.87E+00	3.11E-03	8.75E+01	1.34E+02
13 5%	1.13E-03	4.04E-05	2.44E-04	4.28E-05	7.37E-04	4.34E-05	1.86E-02	5.74E-05	2.85E+00	2.64E-03	8.81E+01	1.34E+02
14 5.30%	1.19E-03	4.92E-05	2.93E-04	4.06E-05	7.04E-04	4.35E-05	2.00E-02	5.79E-05	3.10E+00	3.03E-03	8.84E+01	1.36E+02
15 5.60%	1.00E-03	4.21E-05	3.04E-04	4.13E-05	6.89E-04	3.68E-05	2.10E-02	6.46E-05	3.21E+00	2.55E-03	9.06E+01	1.38E+02
16 6%	8.74E-04	4.03E-05	2.93E-04	4.55E-05	6.36E-04	3.88E-05	1.88E-02	5.77E-05	2.87E+00	1.85E-03	9.08E+01	1.38E+02
17 6.60%	1.21E-03	4.05E-05	5.26E-04	3.90E-05	8.93E-04	3.51E-05	2.72E-02	5.21E-05	4.16E+00	3.20E-03	9.12E+01	1.39E+02
18 7.50%	1.89E-03	3.61E-05	1.25E-03	4.60E-05	1.44E-03	4.11E-05	4.34E-02	5.91E-05	6.72E+00	1.80E-03	9.15E+01	1.41E+02
19 8.50%	3.49E-03	4.40E-05	4.06E-03	4.85E-05	2.80E-03	4.42E-05	8.89E-02	8.17E-05	1.39E+01	5.50E-03	9.24E+01	1.44E+02
20 9.50%	3.09E-03	4.31E-05	4.38E-03	4.96E-05	3.14E-03	4.47E-05	1.03E-01	8.73E-05	1.58E+01	6.75E-03	9.41E+01	1.44E+02
21 10.50%	2.99E-03	4.38E-05	4.97E-03	5.18E-05	4.48E-03	3.67E-05	1.65E-01	1.06E-04	2.46E+01	8.98E-03	9.63E+01	1.43E+02
22 11.50%	2.17E-03	4.33E-05	3.49E-03	4.64E-05	3.97E-03	4.56E-05	1.51E-01	9.07E-05	2.22E+01	8.01E-03	9.71E+01	1.42E+02
23 12.50%	1.90E-03	4.13E-05	3.12E-03	4.38E-05	3.91E-03	4.44E-05	1.50E-01	8.28E-05	2.21E+01	5.49E-03	9.74E+01	1.42E+02
24 14.50%	2.14E-03	4.57E-05	3.76E-03	4.84E-05	4.98E-03	3.70E-05	1.89E-01	1.26E-04	2.76E+01	1.09E-02	9.77E+01	1.42E+02
25 20%	1.33E-03	4.23E-05	2.92E-03	3.88E-05	3.64E-03	4.79E-05	1.44E-01	1.15E-04	2.08E+01	7.22E-03	9.81E+01	1.41E+02
26 25%	1.51E-04	4.11E-05	2.00E-04	4.10E-05	2.54E-04	3.79E-05	9.10E-03	6.02E-05	1.29E+00	3.45E-03	9.65E+01	1.36E+02

Sample: 9398

Project: Tian Shan diatremes

Owner: Lothar

Exp-Nr: 4722

Material: 3.08 mg Bt

4722: Blank corrected intensity intercepts		36Ar	36Ar_err	Reference Standard(s): FCT 28.305 ± 0.036 Ma										%40*	40*/39(K)
				37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	All Errors are 1s!	Fit model: linear		
1	2%	2.71E-04	4.16E-05	0	4.68E-05	4.79E-05	4.08E-05	1.07E-04	5.01E-05	9.37E-02	1.86E-04	12.7	111.22		
2	2.50%	2.05E-04	4.14E-05	3.02E-05	4.52E-05	1.33E-04	5.21E-05	1.87E-03	4.89E-05	1.39E-01	2.57E-04	55.4	40.78		
3	3%	3.40E-04	4.12E-05	9.55E-05	5.04E-05	1.50E-04	4.19E-05	3.49E-03	5.18E-05	2.52E-01	6.36E-04	59.4	42.58		
4	3.50%	2.19E-04	4.39E-05	3.80E-04	4.15E-05	1.68E-04	4.61E-05	6.31E-03	5.82E-05	3.38E-01	9.73E-04	80.4	42.85		
5	4%	1.67E-04	4.10E-05	1.16E-03	4.99E-05	1.49E-04	5.12E-05	6.11E-03	7.17E-05	3.23E-01	1.10E-03	84.5	44.51		
6	4.50%	1.64E-04	4.18E-05	3.63E-03	4.97E-05	1.60E-04	4.33E-05	9.12E-03	7.24E-05	4.46E-01	1.41E-03	89.1	43.36		
7	5%	1.23E-04	4.15E-05	4.43E-03	5.85E-05	1.22E-04	5.29E-05	1.03E-02	7.31E-05	4.92E-01	1.47E-03	92.6	43.90		
8	5.50%	5.76E-05	4.06E-05	3.25E-03	5.25E-05	1.64E-04	5.28E-05	1.35E-02	7.31E-05	6.14E-01	1.82E-03	97.3	43.97		
9	6%	4.72E-05	3.91E-05	4.08E-04	5.02E-05	2.06E-04	4.67E-05	1.64E-02	7.37E-05	7.32E-01	1.78E-03	98.1	43.55		
10	6.50%	2.40E-04	4.50E-05	3.30E-05	5.58E-05	3.17E-04	4.96E-05	2.52E-02	6.90E-05	1.16E+00	1.55E-03	93.8	42.96		
11	7%	4.04E-04	3.96E-05	7.55E-05	5.11E-05	5.58E-04	5.20E-05	3.97E-02	8.61E-05	1.84E+00	2.33E-03	93.4	43.07		
12	7.50%	4.06E-04	4.45E-05	8.09E-05	5.31E-05	8.73E-04	5.17E-05	6.38E-02	9.31E-05	2.86E+00	3.70E-03	95.7	42.72		
13	8%	4.61E-04	4.28E-05	1.28E-04	4.87E-05	1.62E-03	4.69E-05	1.20E-01	1.25E-04	5.28E+00	5.51E-03	97.4	42.70		
14	8.50%	3.09E-04	4.27E-05	1.52E-04	5.16E-05	2.08E-03	4.64E-05	1.62E-01	1.27E-04	7.06E+00	6.37E-03	98.7	42.68		
15	9%	7.38E-04	3.89E-05	1.54E-04	5.23E-05	2.53E-03	5.08E-05	1.90E-01	1.86E-04	8.35E+00	7.03E-03	97.3	42.61		
16	9.50%	2.89E-04	4.46E-05	1.21E-04	5.07E-05	2.50E-03	5.25E-05	1.94E-01	1.91E-04	8.41E+00	8.67E-03	99.0	42.65		
17	10%	5.37E-04	4.29E-05	1.13E-04	5.10E-05	2.38E-03	4.63E-05	1.81E-01	1.66E-04	7.89E+00	6.66E-03	97.9	42.59		
18	10.50%	2.71E-04	4.57E-05	7.47E-05	5.26E-05	1.96E-03	5.42E-05	1.54E-01	1.86E-04	6.67E+00	7.21E-03	98.8	42.63		
19	11%	2.99E-04	4.45E-05	1.23E-04	5.12E-05	1.75E-03	5.32E-05	1.34E-01	1.22E-04	5.82E+00	5.66E-03	98.4	42.44		
20	11.70%	3.11E-04	4.16E-05	1.00E-04	5.63E-05	1.74E-03	4.59E-05	1.32E-01	1.33E-04	5.75E+00	3.74E-03	98.4	42.65		
21	12.40%	4.09E-04	4.25E-05	1.54E-04	5.59E-05	1.95E-03	4.83E-05	1.48E-01	1.14E-04	6.47E+00	5.31E-03	98.1	42.55		
22	13.10%	8.52E-04	3.61E-05	4.84E-05	4.75E-05	1.68E-03	4.66E-05	1.23E-01	1.22E-04	5.54E+00	4.52E-03	95.4	42.62		
23	13.80%	4.32E-04	4.20E-05	8.47E-05	5.64E-05	1.72E-03	5.06E-05	1.33E-01	1.19E-04	5.80E+00	5.13E-03	97.7	42.55		
24	14.60%	7.99E-04	4.86E-05	1.50E-04	5.08E-05	2.60E-03	5.08E-05	1.94E-01	1.17E-04	8.56E+00	4.38E-03	97.2	42.60		
25	15.40%	4.59E-04	4.68E-05	1.92E-04	5.07E-05	3.07E-03	4.69E-05	2.37E-01	1.16E-04	1.03E+01	3.49E-03	98.6	42.61		
26	16.20%	5.97E-04	3.82E-05	1.87E-04	4.30E-05	3.27E-03	4.27E-05	2.49E-01	1.11E-04	1.08E+01	2.59E-03	98.3	42.60		
27	17%	7.01E-04	3.96E-05	2.43E-04	4.58E-05	3.03E-03	4.27E-05	2.27E-01	1.18E-04	9.96E+00	6.02E-03	97.9	42.62		
28	17.80%	9.31E-04	4.40E-05	2.21E-04	5.25E-05	3.28E-03	4.49E-05	2.43E-01	1.10E-04	1.07E+01	2.60E-03	97.4	42.59		

29	19%	1.64E-03	4.53E-05	2.61E-04	5.63E-05	5.24E-03	5.43E-05	3.88E-01	1.61E-04	1.71E+01	6.80E-03	97.1	42.58
30	20.50%	1.88E-03	4.30E-05	2.24E-04	5.01E-05	5.58E-03	5.11E-05	4.10E-01	1.58E-04	1.81E+01	6.08E-03	96.9	42.59

Sample: 1774

Project: Tian Shan diatremes

Owner: Lothar

Exp-Nr: 4734

Material: 3 mg Bt

Irradiation: FGA012P3H5 (End date: 2012-10-30 18:24:00.0)

Measurement I 50:52.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 3.56E-03 f-value: 9.93E-01

All Errors are 1s!

J-Value Error: 8.30E-06 f-value Err: 1.68E-04

Fit model: linear

Reference Standard(s): FCT 28.305 ± 0.036 Ma

4734: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 2.50%	1.80E-03	4.60E-05	1.11E-04	5.06E-05	4.15E-04	6.12E-05	1.50E-03	5.02E-05	5.66E-01	9.56E-04	3.5	13.10
2 3.50%	2.51E-03	4.22E-05	3.16E-03	5.38E-05	8.19E-04	4.37E-05	1.34E-02	5.87E-05	9.85E-01	1.77E-03	22.7	16.59
3 4.50%	1.66E-03	3.99E-05	6.75E-03	5.69E-05	6.82E-04	4.96E-05	1.66E-02	4.62E-05	1.02E+00	2.10E-03	50.5	30.82
4 5.50%	8.65E-04	4.41E-05	3.70E-03	5.85E-05	5.62E-04	4.84E-05	2.18E-02	7.31E-05	1.11E+00	1.65E-03	76.4	38.55
5 6.50%	6.29E-04	3.70E-05	2.32E-03	5.63E-05	6.92E-04	4.75E-05	3.14E-02	8.04E-05	1.45E+00	1.41E-03	86.9	39.94
6 7.50%	5.67E-04	3.93E-05	6.29E-04	4.82E-05	1.27E-03	4.99E-05	6.57E-02	1.13E-04	2.83E+00	3.36E-03	93.9	40.19
7 8.50%	5.96E-04	4.10E-05	4.30E-04	5.12E-05	2.86E-03	5.16E-05	1.52E-01	1.61E-04	6.36E+00	7.06E-03	97.2	40.28
8 9.10%	3.85E-04	4.50E-05	3.93E-04	5.98E-05	3.55E-03	4.64E-05	1.95E-01	1.60E-04	8.01E+00	6.55E-03	98.5	40.18
9 9.70%	4.40E-04	4.39E-05	4.65E-04	5.49E-05	4.44E-03	5.66E-05	2.41E-01	3.12E-04	9.91E+00	1.48E-02	98.6	40.20
10 10.40%	4.57E-04	4.82E-05	6.32E-04	5.78E-05	4.90E-03	4.61E-05	2.65E-01	2.43E-04	1.09E+01	1.07E-02	98.7	40.18
11 11.10%	3.29E-04	4.40E-05	6.89E-04	5.37E-05	4.38E-03	5.54E-05	2.38E-01	1.92E-04	9.74E+00	7.44E-03	99.0	40.19
12 11.80%	2.55E-04	3.83E-05	8.76E-04	5.24E-05	3.72E-03	5.53E-05	2.03E-01	1.90E-04	8.27E+00	7.87E-03	99.1	40.05
13 12.50%	2.37E-04	3.95E-05	1.35E-03	5.71E-05	3.18E-03	4.70E-05	1.70E-01	1.64E-04	6.92E+00	5.87E-03	99.0	40.07
14 13.20%	1.93E-04	4.01E-05	1.16E-03	4.98E-05	2.31E-03	4.70E-05	1.24E-01	1.23E-04	5.05E+00	4.41E-03	98.8	40.13
15 13.90%	2.02E-04	4.49E-05	1.56E-03	5.30E-05	2.43E-03	4.39E-05	1.31E-01	9.31E-05	5.37E+00	3.38E-03	98.9	40.14
16 14.60%	1.73E-04	4.20E-05	1.84E-03	4.96E-05	2.61E-03	5.16E-05	1.37E-01	1.54E-04	5.61E+00	6.42E-03	99.1	40.19
17 15.30%	1.95E-04	4.17E-05	3.08E-03	5.74E-05	3.21E-03	4.49E-05	1.68E-01	1.47E-04	6.85E+00	6.61E-03	99.1	40.17
18 16%	1.76E-04	4.46E-05	2.06E-03	5.23E-05	3.11E-03	5.02E-05	1.65E-01	1.72E-04	6.71E+00	7.05E-03	99.2	40.07
19 16.70%	1.45E-04	3.95E-05	2.48E-03	4.89E-05	3.39E-03	5.10E-05	1.81E-01	1.96E-04	7.36E+00	8.55E-03	99.4	40.19
20 17.40%	1.76E-04	4.63E-05	1.70E-03	5.55E-05	3.28E-03	4.41E-05	1.73E-01	2.65E-04	7.06E+00	8.09E-03	99.2	40.17
21 18.10%	1.22E-04	5.56E-05	1.54E-03	6.00E-05	2.82E-03	5.64E-05	1.52E-01	2.84E-04	6.22E+00	1.10E-02	99.4	40.48
22 18.80%	1.31E-04	4.01E-05	1.09E-03	4.94E-05	3.12E-03	4.96E-05	1.68E-01	1.96E-04	6.84E+00	8.97E-03	99.4	40.17
23 19.50%	1.32E-04	4.37E-05	1.13E-03	4.72E-05	3.10E-03	4.50E-05	1.67E-01	1.79E-04	6.82E+00	6.31E-03	99.4	40.20
24 20.20%	8.47E-05	4.15E-05	4.58E-04	5.70E-05	2.21E-03	4.89E-05	1.22E-01	1.02E-04	4.97E+00	3.61E-03	99.5	40.18
25 20.90%	7.93E-05	4.42E-05	2.99E-04	5.49E-05	1.61E-03	4.93E-05	8.84E-02	1.03E-04	3.59E+00	3.96E-03	99.3	40.04
26 21.60%	6.60E-05	4.04E-05	1.06E-04	5.19E-05	1.38E-03	4.00E-05	7.60E-02	1.31E-04	3.08E+00	3.72E-03	99.3	40.01

27	24%	1.40E-04	3.97E-05	1.83E-04	5.19E-05	6.17E-03	4.47E-05	3.35E-01	3.10E-04	1.37E+01	1.46E-02	99.7	40.27
28	28%	6.61E-05	3.96E-05	4.02E-05	5.43E-05	2.02E-03	5.08E-05	1.09E-01	1.18E-04	4.45E+00	5.31E-03	99.5	40.37

Sample: 1809

Project: Tian Shan diatremes

Owner: Lothar

Exp-Nr: 4736

Material: 33.07 mg Bt

Irradiation: FGA012P3H6 (End date: 2012-10-30 18:24:00.0)

Measurement I 33:52.0

Device: CO2-Laser

Air: 2.96E+02

J-Value: 3.56E-03 f-value: 9.93E-01

All Errors are 1s!

J-Value Error: 8.30E-06 f-value Err: 1.68E-04

Fit model: linear

Reference Standard(s): FCT 28.305 ± 0.036 Ma

4736: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 2.50%	1.18E-03	4.42E-05	2.22E-04	5.94E-05	3.26E-04	5.22E-05	1.22E-03	4.87E-05	3.97E-01	7.32E-04	9.8	31.73
2 3.50%	1.59E-03	4.36E-05	5.61E-03	5.77E-05	6.42E-04	4.73E-05	8.95E-03	5.92E-05	7.88E-01	9.39E-04	39.0	34.16
3 4.50%	1.25E-03	4.59E-05	9.37E-03	6.02E-05	6.88E-04	4.79E-05	1.98E-02	6.75E-05	1.18E+00	1.61E-03	68.0	40.09
4 5.50%	8.31E-04	4.02E-05	2.92E-03	4.75E-05	8.72E-04	4.42E-05	3.97E-02	7.95E-05	1.89E+00	2.79E-03	86.7	40.95
5 6.50%	5.05E-04	4.32E-05	6.48E-04	5.36E-05	1.11E-03	4.82E-05	6.72E-02	1.01E-04	2.93E+00	3.80E-03	94.8	40.97
6 7.50%	4.74E-04	4.39E-05	6.43E-04	4.90E-05	2.09E-03	4.57E-05	1.39E-01	1.81E-04	5.84E+00	7.71E-03	97.5	40.81
7 8.50%	6.86E-04	3.85E-05	8.55E-04	5.17E-05	4.52E-03	4.04E-05	3.16E-01	3.36E-04	1.31E+01	1.65E-02	98.4	40.59
8 9.10%	4.59E-04	4.53E-05	6.80E-04	5.35E-05	5.03E-03	4.64E-05	3.63E-01	4.90E-04	1.49E+01	2.11E-02	99.1	40.31
9 9.70%	3.80E-04	4.39E-05	5.94E-04	5.48E-05	5.11E-03	5.07E-05	3.73E-01	5.76E-04	1.53E+01	2.24E-02	99.2	40.27
10 10.40%	3.23E-04	3.84E-05	5.10E-04	4.72E-05	5.02E-03	4.49E-05	3.71E-01	4.70E-04	1.52E+01	2.09E-02	99.3	40.37
11 11.10%	3.65E-04	3.80E-05	4.73E-04	5.72E-05	4.76E-03	4.50E-05	3.52E-01	5.34E-04	1.44E+01	2.34E-02	99.2	40.37
12 11.80%	2.76E-04	3.99E-05	4.06E-04	5.52E-05	3.98E-03	4.85E-05	2.98E-01	3.42E-04	1.22E+01	1.37E-02	99.3	40.22
13 12.50%	2.62E-04	4.57E-05	3.71E-04	4.55E-05	3.54E-03	4.44E-05	2.62E-01	3.12E-04	1.07E+01	1.40E-02	99.3	40.29
14 13.20%	2.66E-04	4.22E-05	2.90E-04	5.33E-05	3.04E-03	5.11E-05	2.26E-01	2.91E-04	9.25E+00	1.06E-02	99.1	40.21
15 13.90%	2.37E-04	4.67E-05	2.64E-04	5.13E-05	2.81E-03	5.23E-05	2.06E-01	2.63E-04	8.45E+00	1.08E-02	99.1	40.30
16 14.60%	2.47E-04	4.28E-05	2.45E-04	4.73E-05	2.58E-03	4.55E-05	1.89E-01	1.90E-04	7.73E+00	9.51E-03	99.0	40.18
17 15.30%	2.67E-04	4.30E-05	2.33E-04	4.76E-05	2.64E-03	4.63E-05	1.94E-01	1.65E-04	7.97E+00	9.05E-03	99.0	40.41
18 16%	2.56E-04	4.94E-05	2.08E-04	5.65E-05	2.34E-03	5.16E-05	1.73E-01	1.65E-04	7.09E+00	6.71E-03	98.9	40.24
19 16.70%	3.04E-04	3.75E-05	2.57E-04	5.63E-05	2.35E-03	4.92E-05	1.71E-01	2.11E-04	7.04E+00	7.70E-03	98.7	40.36
20 17.40%	1.82E-04	4.55E-05	2.56E-04	5.21E-05	2.11E-03	4.94E-05	1.55E-01	1.63E-04	6.34E+00	5.74E-03	99.1	40.20
21 18.10%	1.26E-04	4.25E-05	1.53E-04	6.08E-05	1.62E-03	4.95E-05	1.19E-01	1.21E-04	4.88E+00	5.25E-03	99.2	40.35
22 18.80%	1.31E-04	3.74E-05	2.01E-04	5.20E-05	1.75E-03	3.70E-05	1.29E-01	1.71E-04	5.27E+00	6.87E-03	99.2	40.31
23 19.50%	1.32E-04	4.68E-05	3.16E-04	5.73E-05	1.36E-03	5.22E-05	1.01E-01	1.26E-04	4.13E+00	4.80E-03	99.0	40.13
24 20.20%	9.06E-05	3.87E-05	7.69E-05	5.23E-05	8.28E-04	4.74E-05	6.33E-02	9.11E-05	2.59E+00	2.21E-03	98.9	40.14
25 20.90%	7.07E-05	4.47E-05	5.73E-05	5.69E-05	7.93E-04	5.15E-05	5.99E-02	1.12E-04	2.44E+00	3.27E-03	99.1	40.09
26 21.60%	3.59E-05	4.25E-05	2.86E-05	5.81E-05	5.99E-04	4.78E-05	4.51E-02	8.90E-05	1.84E+00	2.44E-03	99.4	40.29

27 24% 2.46E-05 4.65E-05 4.02E-05 5.43E-05 4.48E-04 4.94E-05 3.20E-02 7.99E-05 1.31E+00 1.49E-03 99.4 40.37

Sample: 9490

Project: Tian Shan diatremes
Owner: Lothar

Exp-Nr: 4852

Material: 50.85 mg Hbl

Irradiation: FGA012P2H10 (End date: 2012-10-30 18:24:00.0)

Measurement I 28:09.0

Device: HTC

Air: 2.96E+02

J-Value: 3.54E-03 f-value: 9.93E-01

All Errors are 1s!

J-Value Error: 5.28E-06 f-value Err: 3.92E-04

Fit model: quadratic

Reference Standard(s): FCT 28.305 ± 0.036 Ma

4852: Blank corrected intensity intercepts	36Ar	36Ar_err	37Ar	37Ar_err	38Ar	38Ar_err	39Ar	39Ar_err	40Ar	40Ar_err	%40*	40*/39(K)
1 Step 900°C	1.47E-03	1.66E-04	8.17E-04	1.80E-04	3.73E-04	2.07E-04	9.05E-04	1.79E-04	4.15E-01	8.86E-04	-7.8	-35.63
2 Step 950°C	5.23E-04	5.65E-05	1.39E-03	6.60E-05	3.45E-04	6.92E-05	3.46E-03	6.38E-05	2.31E-01	2.38E-04	31.5	20.98
3 Step 1000°C	6.04E-04	6.56E-05	3.84E-03	7.86E-05	3.80E-04	5.55E-05	7.05E-03	6.80E-05	3.94E-01	5.80E-04	53.9	30.03
4 Step 1050°C	3.50E-04	6.32E-05	1.25E-03	6.78E-05	1.39E-04	6.45E-05	3.96E-03	7.01E-05	2.38E-01	7.14E-04	55.6	33.27
5 Step 1100°C	1.35E-03	5.99E-05	2.36E-03	6.97E-05	4.98E-04	6.22E-05	9.26E-03	7.45E-05	7.03E-01	1.22E-03	41.7	31.51
6 Step 1150°C	6.78E-04	6.46E-05	3.15E-03	8.18E-05	4.95E-04	5.76E-05	1.42E-02	7.83E-05	7.61E-01	1.28E-03	73.1	38.78
7 Step 1200°C	8.31E-04	6.15E-05	4.42E-03	5.95E-05	7.16E-04	6.86E-05	1.78E-02	7.47E-05	9.77E-01	1.56E-03	74.4	40.49
8 Step 1240°C	4.64E-04	5.84E-05	3.33E-03	7.32E-05	4.39E-04	6.14E-05	1.32E-02	6.25E-05	7.05E-01	1.14E-03	80.3	42.48
9 Step 1270°C	2.19E-04	5.58E-05	4.73E-03	6.82E-05	4.92E-04	5.49E-05	1.69E-02	7.24E-05	8.17E-01	1.02E-03	92.2	44.44
10 Step 1300°C	7.00E-04	5.77E-05	3.53E-02	8.90E-05	3.88E-03	7.03E-05	1.38E-01	1.75E-04	6.25E+00	7.86E-03	96.9	43.74
11 Step 1310°C	2.06E-03	6.39E-05	2.31E-01	3.10E-04	2.44E-02	8.52E-05	9.31E-01	1.25E-03	4.10E+01	6.26E-02	98.8	43.22
12 Step 1313°C	2.09E-03	7.17E-05	3.99E-01	5.51E-04	4.16E-02	9.75E-05	1.61E+00	2.20E-03	7.03E+01	1.02E-01	99.4	43.12
13 Step 1314°C	8.49E-04	5.50E-05	2.09E-01	3.34E-04	2.17E-02	6.96E-05	8.42E-01	1.30E-03	3.67E+01	6.26E-02	99.6	43.12
14 Step 1315°C	1.18E-03	6.35E-05	2.53E-01	2.95E-04	2.64E-02	6.27E-05	1.02E+00	1.14E-03	4.46E+01	5.07E-02	99.5	43.05
15 Step 1316°C	4.03E-04	6.05E-05	8.41E-02	1.33E-04	8.73E-03	5.76E-05	3.39E-01	4.78E-04	1.48E+01	2.23E-02	99.5	43.10
16 Step 1317°C	4.49E-04	6.08E-05	8.77E-02	1.23E-04	9.14E-03	6.17E-05	3.54E-01	3.34E-04	1.54E+01	1.61E-02	99.4	43.07
17 Step 1318°C	5.35E-04	6.19E-05	1.08E-01	1.74E-04	1.12E-02	5.94E-05	4.35E-01	6.11E-04	1.89E+01	2.71E-02	99.5	43.08
18 Step 1319°C	5.51E-04	2.11E-04	1.35E-01	2.17E-03	1.42E-02	2.99E-04	5.49E-01	9.40E-03	2.40E+01	3.76E-01	99.6	43.27
19 Step 1320°C	5.66E-04	5.94E-05	1.39E-01	1.71E-04	1.44E-02	6.52E-05	5.63E-01	6.21E-04	2.45E+01	3.01E-02	99.6	43.08
20 Step 1321°C	5.19E-04	6.48E-05	1.10E-01	1.69E-04	1.15E-02	6.50E-05	4.46E-01	5.87E-04	1.94E+01	2.96E-02	99.5	43.04
21 Step 1322°C	4.34E-04	6.39E-05	1.10E-01	1.55E-04	1.15E-02	5.80E-05	4.49E-01	5.29E-04	1.96E+01	2.82E-02	99.6	43.10
22 Step 1323°C	4.35E-04	6.60E-05	1.09E-01	1.20E-04	1.13E-02	5.98E-05	4.43E-01	4.10E-04	1.93E+01	1.83E-02	99.6	43.09
23 Step 1324°C	4.50E-04	5.84E-05	1.19E-01	1.52E-04	1.24E-02	5.89E-05	4.84E-01	5.61E-04	2.11E+01	2.44E-02	99.7	43.12
24 Step 1325°C	3.99E-04	6.09E-05	1.10E-01	2.07E-04	1.15E-02	6.38E-05	4.48E-01	6.92E-04	1.95E+01	3.20E-02	99.7	43.07
25 Step 1326°C	4.56E-04	6.44E-05	1.23E-01	1.79E-04	1.28E-02	6.60E-05	5.01E-01	6.92E-04	2.18E+01	2.99E-02	99.7	43.10
26 Step 1327°C	5.00E-04	1.75E-04	1.26E-01	8.46E-04	1.31E-02	2.02E-04	5.12E-01	2.75E-03	2.21E+01	1.68E-01	99.6	42.77
27 Step 1328°C	4.92E-04	7.34E-05	1.30E-01	1.61E-04	1.37E-02	5.79E-05	5.29E-01	6.73E-04	2.30E+01	3.00E-02	99.7	43.08

30	Step 1345°C	9.43E-04	5.97E-05	2.25E-01	3.75E-04	2.35E-02	8.20E-05	9.21E-01	1.56E-03	4.01E+01	7.56E-02	99.6	43.09
31	Step 1365°C	1.10E-03	5.45E-05	2.13E-01	1.88E-04	2.24E-02	6.91E-05	8.69E-01	7.28E-04	3.79E+01	3.70E-02	99.4	43.16
32	Step 1400°C	3.28E-04	5.84E-05	2.56E-02	6.18E-05	2.77E-03	5.60E-05	1.05E-01	1.23E-04	4.64E+00	4.45E-03	98.2	43.19
33	Step 1450°C	6.11E-04	6.19E-05	1.44E-02	6.67E-05	1.67E-03	5.59E-05	5.91E-02	1.41E-04	2.73E+00	4.54E-03	93.5	42.92

Sample: P-III

Project: Tian_Shan_diatreems
Owner: Lothar

Exp-Nr: 6996

Material: 3.02 mg Bt

Irradiation: FGA017P3H7 (End date: 2014-04-23 13:25:00)

Measurement I 2014-12-02 18:39:55

Device: CO2-Laser

Air: 2.99E+02

J-Value: 4.31E-03 f-value: 9.88E-01

J-Value Error: 1.57E-05 f-value Err: 2.09E-04

Reference Standard(s): FCT01 - 28.305 +/- 0.036 Ma

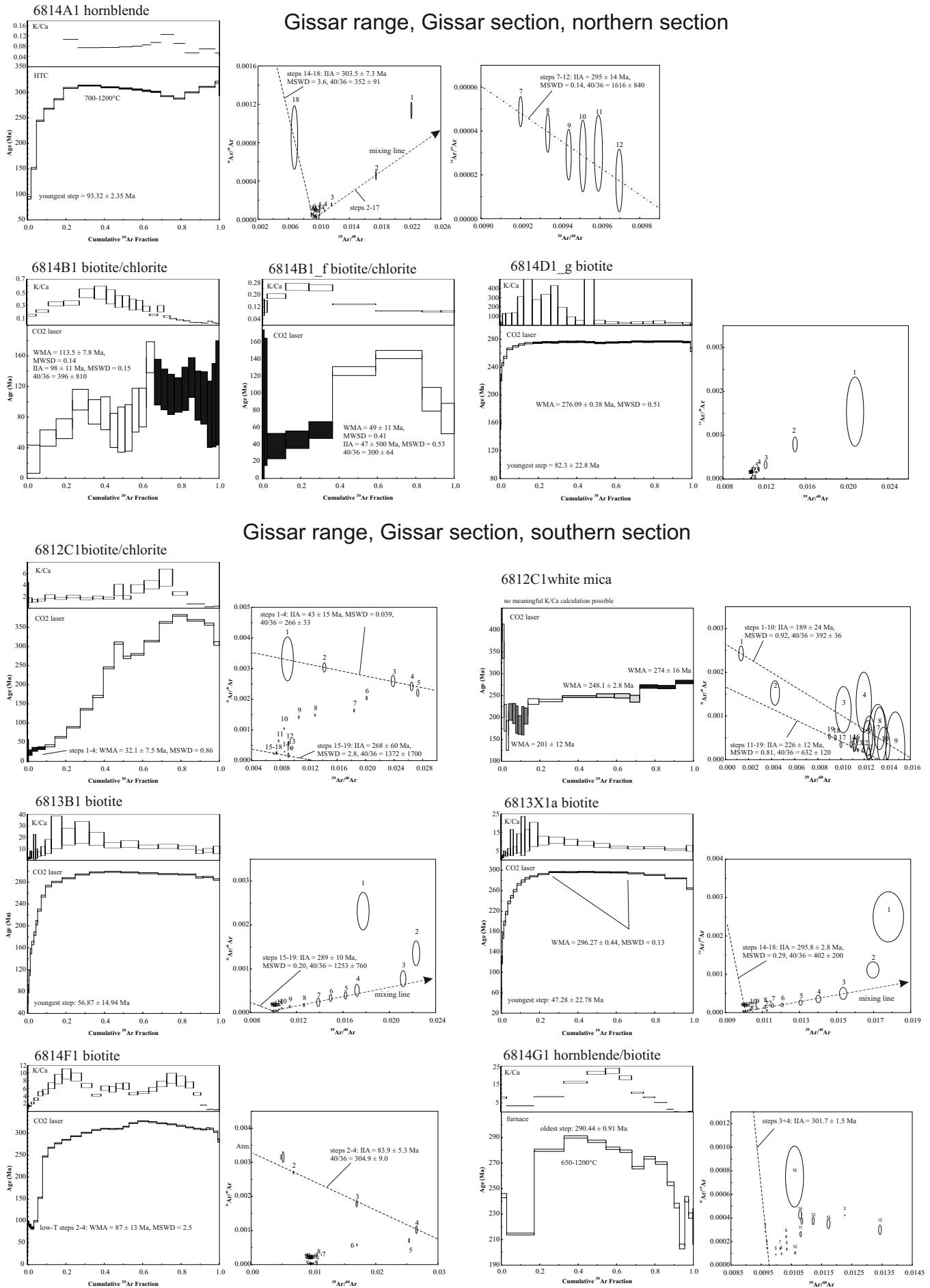
Blank corrected intensity intercepts:

Nr.	Step	36Ar	$\pm\sigma_{36}$	37Ar	$\pm\sigma_{37}$	38Ar	$\pm\sigma_{38}$	39Ar	$\pm\sigma_{39}$	40Ar	$\pm\sigma_{40}$	%40*	40*/39(K)
1	0.025	1.26E-03	4.62E-05	2.77E-05	6.43E-05	3.85E-04	6.01E-05	3.15E-03	6.19E-05	4.23E-01	5.06E-04	6.7	4.54
2	0.032	1.61E-03	4.65E-05	8.56E-05	6.91E-05	7.91E-04	6.56E-05	2.75E-02	7.57E-05	9.28E-01	8.60E-04	45.8	0.53
3	0.037	9.21E-04	4.63E-05	3.25E-04	6.63E-05	6.56E-04	6.20E-05	3.19E-02	7.75E-05	1.08E+00	6.17E-04	73.5	0.45
4	0.044	4.31E-04	4.57E-05	3.74E-04	6.69E-05	4.59E-04	6.78E-05	2.62E-02	8.03E-05	9.69E-01	9.40E-04	86.3	0.55
5	0.055	2.99E-04	4.49E-05	3.03E-04	6.84E-05	4.99E-04	6.27E-05	3.03E-02	8.55E-05	1.12E+00	9.74E-04	91.8	0.47
6	0.072	4.86E-04	4.49E-05	1.52E-04	6.77E-05	1.18E-03	6.07E-05	6.80E-02	8.81E-05	2.43E+00	6.83E-04	93.8	0.21
7	0.09	7.41E-04	4.26E-05	9.20E-05	6.96E-05	4.81E-03	5.74E-05	2.78E-01	1.06E-04	9.49E+00	2.61E-03	97.6	0.05
8	0.098	2.43E-04	4.70E-05	5.61E-05	6.86E-05	4.55E-03	5.72E-05	2.67E-01	1.17E-04	8.96E+00	2.04E-03	99.2	0.06
9	0.101	1.56E-04	4.76E-05	2.38E-05	6.93E-05	3.55E-03	6.23E-05	2.07E-01	1.13E-04	6.94E+00	1.98E-03	99.3	0.07
10	0.104	9.50E-05	4.86E-05	3.59E-05	6.47E-05	3.16E-03	6.88E-05	1.84E-01	9.64E-05	6.15E+00	1.23E-03	99.5	0.08
11	0.109	1.03E-04	4.50E-05	7.33E-06	6.78E-05	3.05E-03	6.49E-05	1.76E-01	1.00E-04	5.88E+00	1.29E-03	99.5	0.08
12	0.118	1.90E-04	4.86E-05	1.74E-05	6.47E-05	3.28E-03	6.17E-05	1.92E-01	1.39E-04	6.45E+00	2.90E-03	99.1	0.08
13	0.128	2.44E-04	4.47E-05	6.66E-05	6.31E-05	3.84E-03	6.59E-05	2.20E-01	1.02E-04	7.38E+00	1.70E-03	99.0	0.07
14	0.136	2.60E-04	4.25E-05	4.48E-05	6.26E-05	4.13E-03	6.37E-05	2.38E-01	1.39E-04	8.00E+00	2.74E-03	99.0	0.06
15	0.142	2.53E-04	4.45E-05	1.19E-04	6.73E-05	4.17E-03	6.00E-05	2.40E-01	1.10E-04	8.03E+00	1.98E-03	99.0	0.06
16	0.148	2.81E-04	4.66E-05	1.26E-04	6.39E-05	4.46E-03	6.44E-05	2.53E-01	1.06E-04	8.49E+00	2.09E-03	99.0	0.06
17	0.153	2.03E-04	4.52E-05	8.08E-05	6.01E-05	3.26E-03	6.85E-05	1.87E-01	8.73E-05	6.27E+00	8.82E-04	99.0	0.08
18	0.161	1.73E-04	4.16E-05	7.34E-05	6.77E-05	3.59E-03	6.44E-05	2.04E-01	1.20E-04	6.84E+00	2.56E-03	99.2	0.07
19	0.172	1.40E-04	4.38E-05	4.98E-05	6.15E-05	2.42E-03	6.83E-05	1.35E-01	9.54E-05	4.54E+00	9.90E-04	99.0	0.10
20	0.19	1.19E-04	4.06E-05	2.10E-05	6.51E-05	2.12E-03	6.09E-05	1.20E-01	9.42E-05	4.02E+00	1.34E-03	99.1	0.11
21	0.22	2.91E-04	5.10E-05	1.62E-04	5.84E-05	6.32E-03	6.55E-05	3.56E-01	1.80E-04	1.20E+01	4.67E-03	99.2	0.05
22	0.23	1.97E-04	4.54E-05	6.41E-05	6.04E-05	4.19E-03	6.16E-05	2.37E-01	1.20E-04	7.96E+00	2.93E-03	99.2	0.06
23	0.24	6.21E-05	4.85E-05	1.29E-05	6.39E-05	1.36E-03	6.71E-05	7.75E-02	9.49E-05	2.60E+00	1.90E-03	99.3	0.20

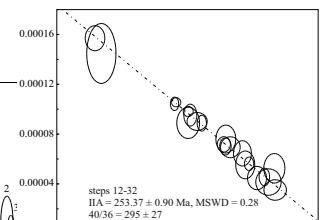
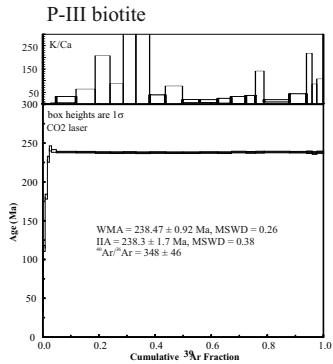
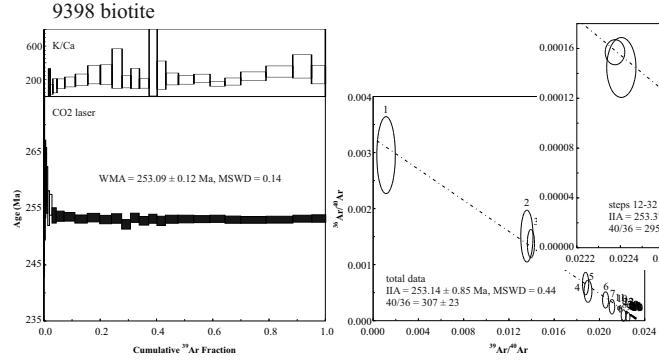
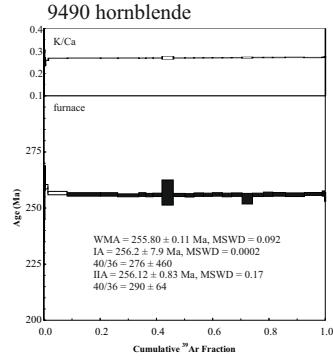
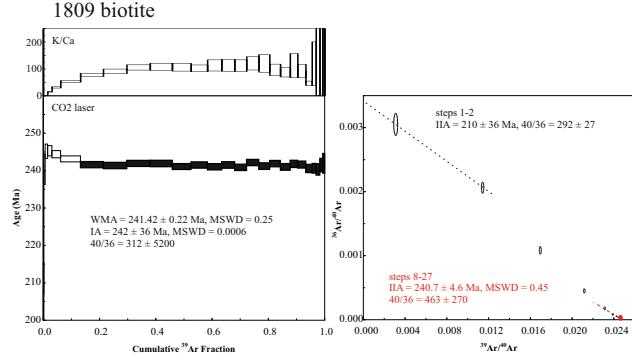
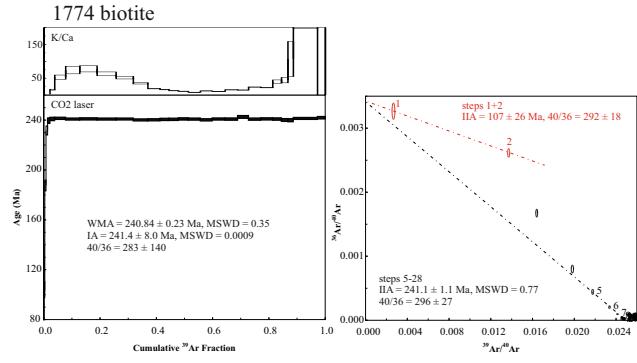
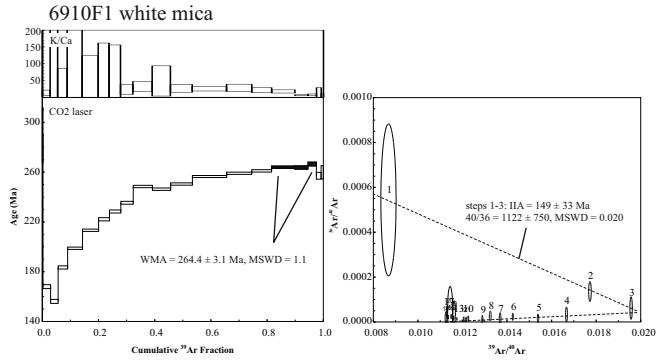
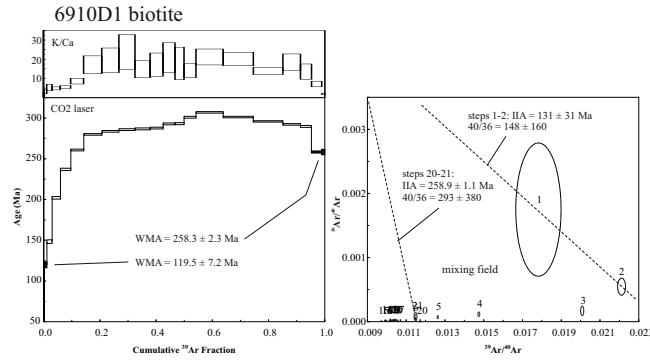
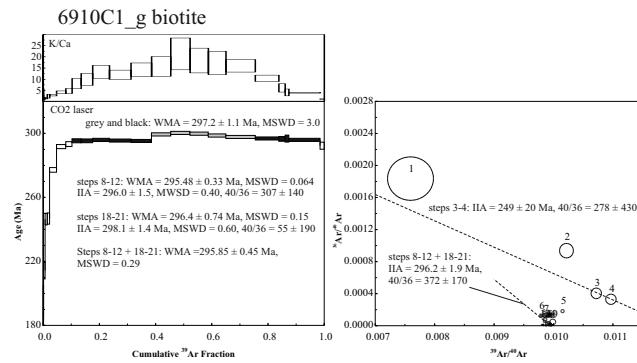
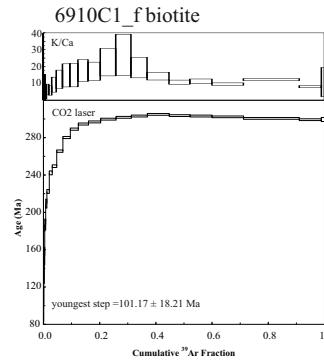
24	0.265	8.44E-05	4.29E-05	1.97E-05	6.43E-05	1.18E-03	6.67E-05	6.55E-02	9.34E-05	2.20E+00	1.26E-03	98.8	0.21
25	0.3	1.11E-04	4.83E-05	2.17E-05	6.77E-05	1.63E-03	6.34E-05	9.31E-02	8.56E-05	3.14E+00	1.64E-03	98.9	0.16

Note: Hbl, amphibole; Bt, biotite; Ms, white mica; Chl, chlorite; Kfs, K-feldspar; HTC, high-temperature cell.

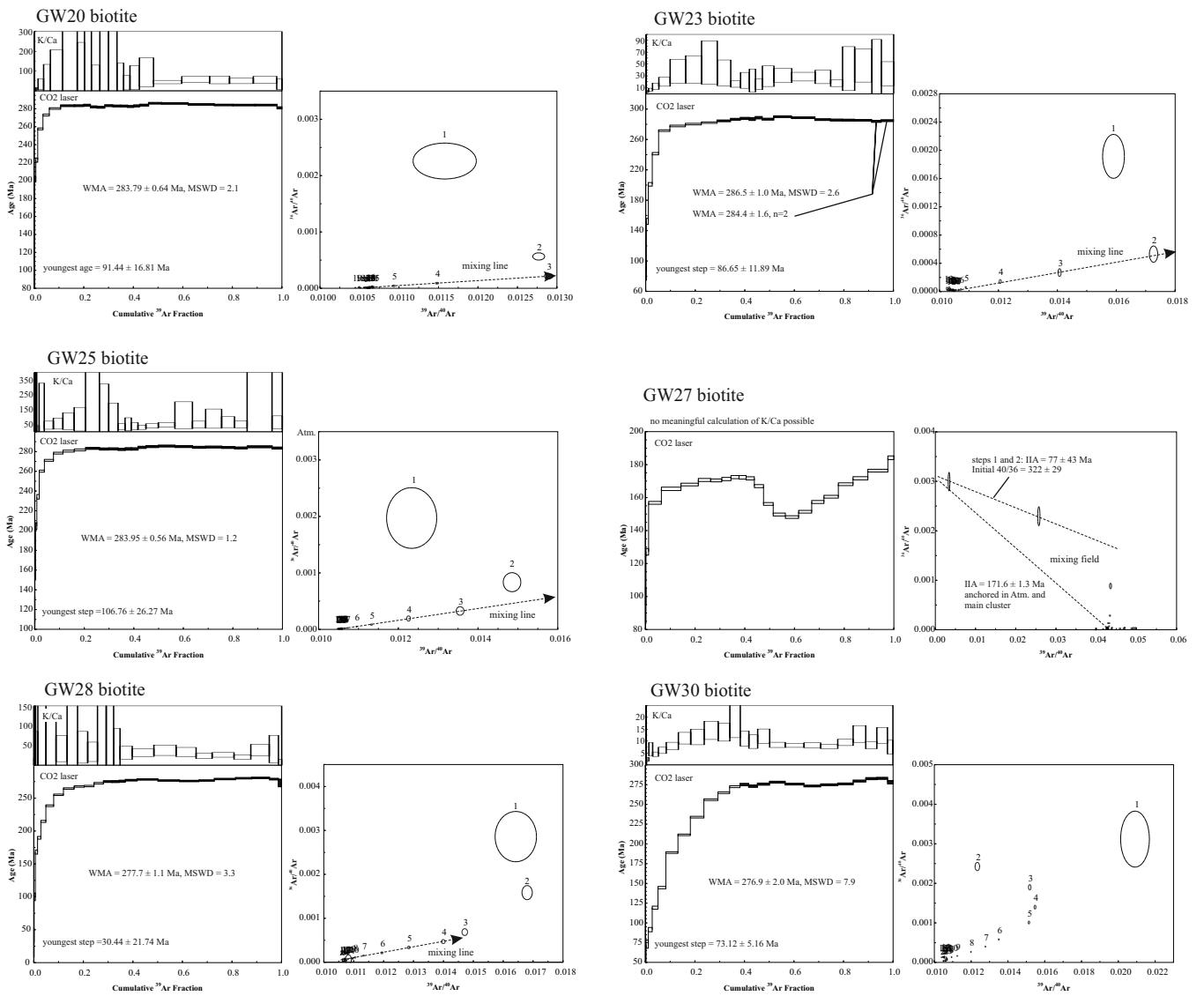
Figure DR 5. New $^{40}\text{Ar}/^{39}\text{Ar}$ mineral ages from the Gissar-Alai range granitoids and basanites and the Garm-massif gneisses. See Table 2 for a summary and interpretation of the data and Table DR6 for analytical details.



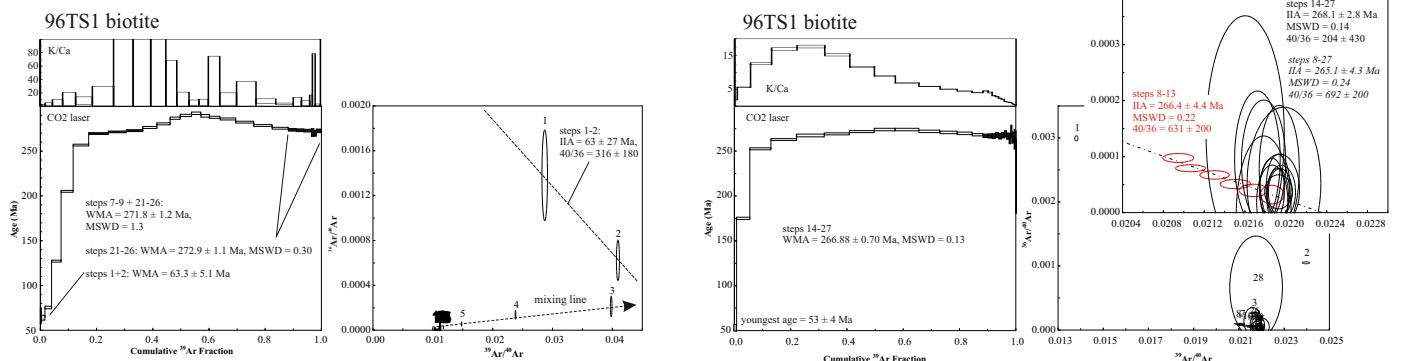
Gissar range, eastern part



Garm massif

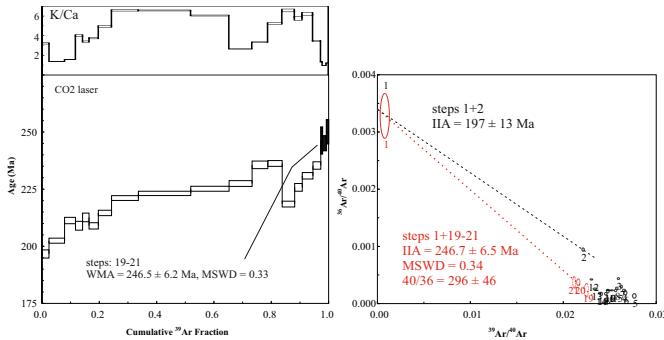


Alai range

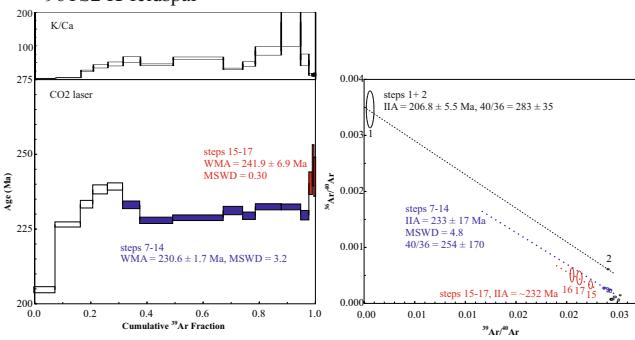


Alai range, continuation

96TS1 feldspar



96TS2 K-feldspar



TS18a biotite

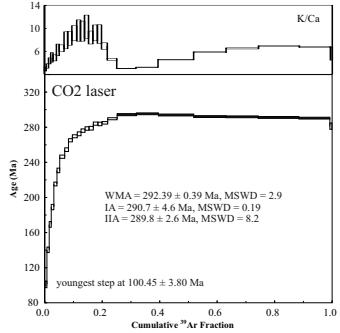


Figure DR6. Mesozoic-Cenozoic stratigraphy of the intra-montane Ziddi and Kichi-Karakol basins and sample locations. From Vlasov et al. (1991) and own observations.

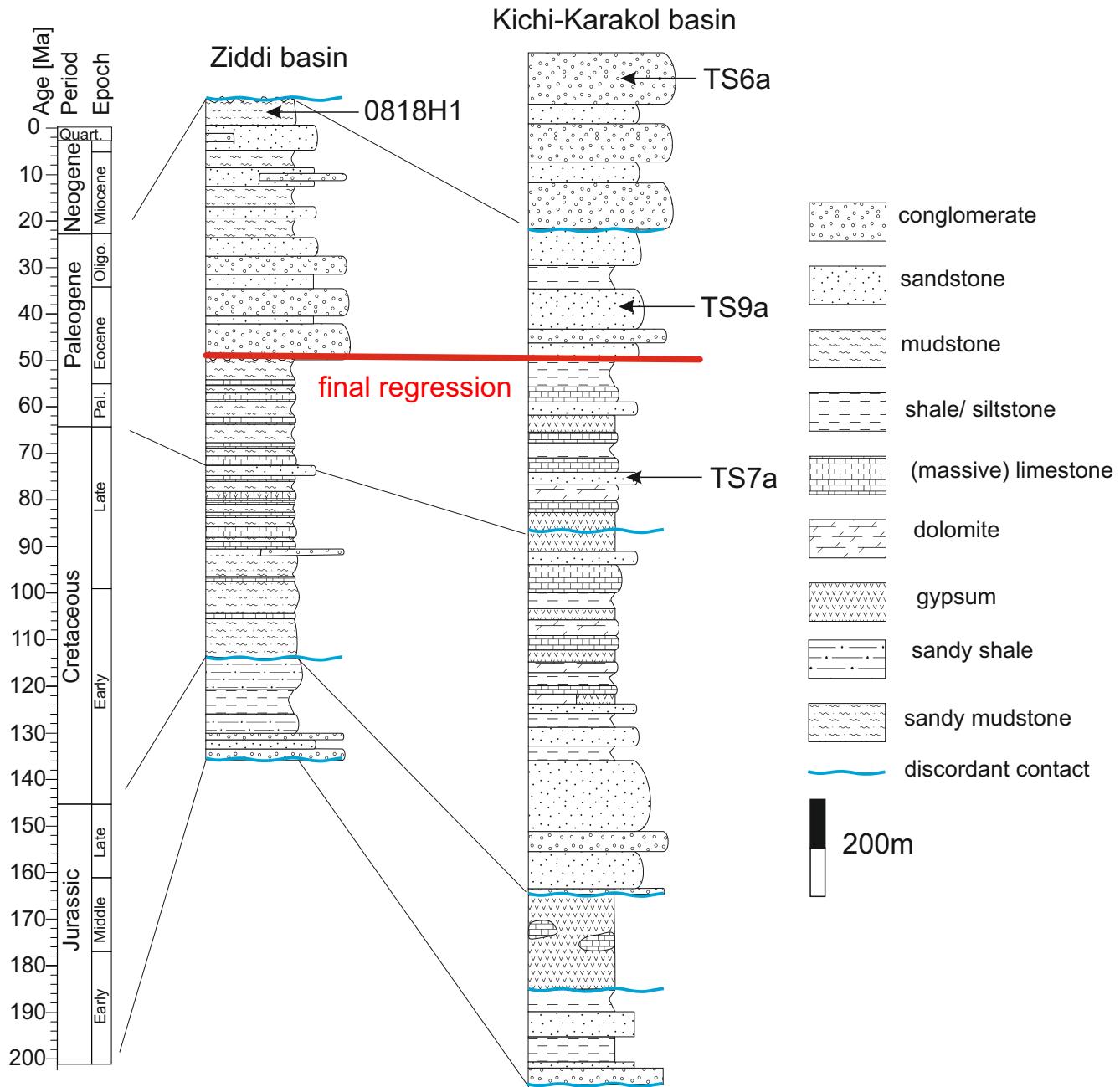


Table DR7. AL-IN-HORNBLENDE GEOBAROMETRY

Sample	Rock Type	Count	Al ^T (apfu)	Error ($\pm 2\sigma$)	P (kbar)	Error ($\pm 2\sigma$)	Depth [*] (km)	Error ($\pm 2\sigma$)	Fe/Fe+Mg	Fe ³⁺ /Fe ³⁺ Fe ²⁺	Plagioclase (rim)
6814A1	Granite	13	1.13	0.11	2.39	0.54	8.84	2.00	0.53	0.16	An 39
6814B1	Granite	10	1.43	0.04	3.79	0.19	14.05	0.71	0.53	0.24	An 48 [†]
6814C1	Kfs-granite	18	1.49	0.07	4.07	0.32	15.06	1.19	0.55	0.21	An 28
6814D1	Granodiorite	23	1.69	0.10	5.05	0.50	18.72	1.84	0.61	0.22	An 36
6910C1	Granite	32	1.18	0.09	2.62	0.44	9.69	1.64	0.55	0.20	An 32

^{*}Calculated assuming an rock density of 2.7g cm⁻¹.

[†]Plagioclase weakly altered.

TABLE DR8. MAJOR AND TRACE ELEMENT COMPOSITION OF GRANITOIDS, GNEISSES, AND BASANITES

Sample Rock	6812C1 granitoid	6814A1 granitoid (296 ± 6 Ma)	6814C1 granitoid (297 ± 6 Ma)	6814G1 granitoid (286 ± 6 Ma)	6814H1 granitoid (2238 ± 9 Ma)	6910C1 granitoid (301 ± 6 Ma)	6910D1 granitoid (297 ± 6 Ma)	6910F1 granitoid	GW20 gneiss (661 ± 15 Ma)	GW22 gneiss (2289 ± 6 Ma)	GW23 gneiss (645 ± 9 Ma)	GW28 gneiss (552 ± 37 Ma)	1519 basanite	1580 basanite	1642 basanite
SiO ₂	76.2	65.1	68.6	76.3	76.3	63.9	72.1	73.8	68.0	68.2	67.9	67.6	41.9	41.7	42.4
TiO ₂	0.08	0.50	0.30	0.16	0.05	0.56	0.25	0.06	0.43	0.48	0.55	0.422	1.66	1.19	1.09
Al ₂ O ₃	12.9	16.0	15.1	12.6	12.9	16.0	14.5	14.8	16.3	15.3	15.3	16.1	15.0	9.80	12.9
Fe ₂ O ₃	0.86	4.93	3.04	1.26	0.83	5.2	1.71	0.92	3.51	3.31	4.95	3.38	9.00	9.36	10.7
FeO*	0.77	4.44	2.74	1.13	0.75	4.68	1.54	0.83	3.16	2.98	4.45	3.04			
MgO	0.17	1.72	0.81	0.26	0.04	1.92	0.38	0.17	1.59	1.08	2.07	1.79	9.36	16.37	12.06
CaO	0.31	4.15	2.61	0.18	0.83	4.14	1.45	0.67	2.18	3.11	0.89	2.84	11.6	11.8	13.8
Na ₂ O	3.29	2.91	3.14	2.62	3.53	3.04	3.33	4.21	3.56	2.94	2.2	3.3	2.11	0.87	1.88
K ₂ O	5.23	3.19	4.46	5.37	4.79	3.56	4.62	4.31	2.68	3.61	3.33	2.69	2.95	1.66	1.21
P ₂ O ₅	0.03	0.15	0.16	0.07	0.01	0.18	0.13	0.21	0.17	0.15	0.02	0.07	0.78	0.20	0.72
MnO	0.02	0.08	0.06	0.02	0.04	0.09	0.03	0.05	0.06	0.06	0.08	0.04	0.14	0.14	0.20
Cr ₂ O ₃	0.003	0.005	0.003	b.d.l.	0.005	0.004	0.005	0.004	0.004	b.d.l.	0.011	0.006	0.03	0.11	0.10
LOI	0.90	1.10	1.50	1.10	0.70	1.10	1.40	0.80	1.50	1.60	2.60	1.70	4.90	6.20	2.50
Total	99.96	99.83	99.69	99.93	100.02	99.73	99.88	100	99.91	99.81	99.87	99.85	99.52	99.45	99.49
Cs	7.7	5.8	1.0	4.4	13.0	4.2	3.4	4.7	7.9	4.0	32.3	2.5	35.5	9.9	3.0
Rb	379	109	86	290	360	128	180	235	102.2	129.3	223.2	123.6	85.1	52.0	35.2
Ba	83	747	1921	421	7	1315	838	108	457	965	440	702	614	1200	577
Th	29.7	14.1	11.3	24.7	22.7	17.4	14.8	4	2.1	17.6	12.3	3.5	7.0	2.0	8.2
U	9.8	3.1	2.5	5.8	14.6	4	3.5	2.6	1.8	2.1	6.4	1	1.7	0.6	2.9
Sr	43.9	282.3	411.9	84.7	17.1	494	172.6	31.3	189.8	274.2	139.7	339.9	1235	561.6	1162
Pb	68.5	6.3	11.8	45	14.3	3.3	5.2	1	3.8	16.2	6.3	3.2	1.8	4.80	
Y	47.2	18.4	8.6	22.4	24.5	16.9	18	12.1	11.1	22.6	9.9	4.9	25.5	14.8	29.7
Sc	3	11	4	3	3	8	3	3	9	7	7	7	24	32	29
Cr	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	219	746	664
Ni	3.1	9.6	6	3.7	9.6	8.8	5.7	6.2	8.7	3.1	21	12.8	139	447	180
Co	0.8	10.1	4.4	1.5	0.5	10	1.7	0.8	5.4	4.2	8.8	7.1	43.7	69.6	50.7
Ga	17.6	17.5	14.9	14.5	17.2	18.5	20	21.7	18.2	17.8	22.6	19.7	15.5	10.7	16.8
Sn	9	4	4	4	8	1	5	18	5	5	7	1	1	1	2
Mo	0.4	0.4	0.7	0.6	1.7	0.8	1	1.1	0.2	b.d.l.	0.5	0.2	1.9	0.6	2.4
Cu	15.5	11.5	11.2	1.6	5.1	1.7	0.7	1.4	4.1	1.2	19.9	15.2	76	141	65
Zn	56	59	48	82	28	53	56	12	44	60	104	64	48	42	60
Nb	18.7	7.7	4.7	11.4	12.6	9	11.9	15.9	9.2	10.7	15	13.6	43.7	13.9	11.5
Ta	3.7	0.8	0.3	1.4	2.2	0.7	1.2	3.3	0.9	1.3	1.3	0.8	2.10	0.70	0.70
Zr	84.3	141	178	99.0	48.9	150	119	52.2	91.2	128	134	125	155	84.6	189
Hf	4.3	4	5.1	3.8	2.7	4.5	3.8	2.4	2.5	3.9	3.9	3.2	3.40	1.90	4.40
La	13.5	31.8	37.9	17.3	5	35.2	29.1	8.6	8.6	41.6	28.1	14.3	69.3	22.5	58.2
Ce	32.9	61.9	66.8	35.7	13.6	64	59.4	18.1	16.1	82.8	60	26.7	130.7	45.1	111.2
Pr	4.61	7.13	6.7	4.28	2.05	7.19	7.08	2.18	1.88	9.644	6.88	2.9	14.55	5.51	12.68
Nd	19.3	27	21.6	16.5	8.9	25.8	27.1	8.4	6.9	36.8	25.3	10.8	58.0	23.1	52.5
Sm	6.17	4.89	3.17	3.87	3.11	4.64	5.46	2.03	1.41	6.79	5.16	1.78	8.97	4.36	9.63
Eu	0.17	1.03	1.01	0.4	0.1	1.01	0.68	0.1	0.9	0.97	0.62	1.32	2.63	1.37	2.74
Gd	6.03	4.06	2.2	3.56	3.18	3.72	4.49	1.93	1.29	5.34	4.09	1.25	7.56	3.76	8.46
Tb	1.16	0.61	0.35	0.63	0.63	0.56	0.69	0.39	0.27	0.78	0.56	0.18	0.96	0.53	1.13
Dy	7.20	3.20	1.75	3.65	3.77	3.15	3.4	2.28	1.82	4.29	2.19	0.94	4.84	2.78	6.10
Ho	1.47	0.64	0.36	0.72	0.82	0.6	0.58	0.4	0.39	0.78	0.34	0.2	0.94	0.52	1.00
Er	4.72	1.82	0.9	2.17	2.51	1.65	1.59	1.11	1.25	2.26	0.87	0.61	2.55	1.46	2.80
Tm	0.75	0.28	0.17	0.35	0.42	0.27	0.24	0.17	0.20	0.35	0.12	0.08	0.36	0.18	0.42
Yb	5.28	1.77	0.99	2.39	2.77	1.66	1.44	1.06	1.29	2.2	0.70	0.54	2.27	1.27	2.47
Lu	0.78	0.26	0.23	0.35	0.44	0.25	0.21	0.14	0.19	0.32	0.11	0.08	0.33	0.19	0.37
Na ₂ O/K ₂ O	0.63	0.91	0.70	0.49	0.74	0.85	0.72	0.98	1.33	0.81	0.66	1.23	0.72	0.52	1.55
CaO/Na ₂ O	0.09	1.43	0.83	0.07	0.24	1.36	0.44	0.16	0.61	1.06	0.40	0.86	5.51	13.54	7.32
MALI	8.2	2.0	5.0	7.8	7.5	2.5	6.5	7.9	4.1	3.4	4.6	3.2	--	--	--
ASI	1.1	1.0	1.0	1.2	1.0	1.0	1.1	1.2	1.3	1.1	1.7	1.2	0.5	0.4	0.4
ZNCY	183	229	258	169	99.6	240	208	98.3	128	244	219	170	355	158	342
Rb/Sr	8.63	0.38	0.21	3.43	21.07	0.26	1.04	7.51	0.54	0.47	1.60	0.36	0.07	0.09	0.03
La/Yb	2.56	18.0	38.3	7.24	1.81	21.2	20.2	8.11	6.67	18.91	40.14	26.48	30.5	17.7	23.6
(La/Yb)n	1.83	12.9	27.5	5.19	1.29	15.2	14.5	5.82	4.78	13.6	28.8	19.0	21.9	12.7	16.9
Gd/Yb	1.14	2.29	2.22	1.49	1.15	2.24	3.12	1.82	1.00	2.43	5.84	2.31	3.33	2.96	3.43
Th/U	3.03	4.55	4.52	4.26	1.55	4.35	4.23	1.54	1.17	8.38	1.92	3.50	4.12	3.33	2.83
Nb/U	1.91	2.48	1.88	1.97	0.86	2.25	3.40	6.12	5.11	5.10	2.34	13.6	25.7	23.2	3.97
Nb/La	1.39	0.24	0.12	0.66	2.52	0.26	0.41	1.85	1.07	0.26	0.53	0.95	0.63	0.62	0.20
Ce/Pb	0.48	9.83	5.66	0.79	0.95	19.4	11.4	18.1	4.24	5.11	9.52	8.34	72.6	32.2	13.9

Note: Major elements in wt%, trace elements in ppm.

TABLE DR9. NORMATIVE MINERAL COMPOSITIONS

	6812C1		6814A1		6814C1		6814G1		6814H1		6910C1		6910D1		6910F1		GW20		GW22		GW23		GW28	
	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	vol%
Quartz	35.61	35.86	21.55	22.80	24.72	25.69	39.11	39.74	35.06	35.14	17.80	18.85	30.59	31.36	31.06	31.45	28.09	29.75	27.23	28.54	34.09	37.24	27.21	28.81
Plagioclase	29.21	29.68	44.31	46.35	38.61	39.94	22.63	23.24	33.92	34.18	45.25	47.41	34.58	35.52	37.58	38.38	39.88	42.19	39.41	40.99	22.95	25.12	41.66	43.86
Orthoclase	30.91	32.22	18.85	20.65	26.36	28.35	31.73	33.38	28.31	29.37	21.04	23.06	27.30	28.97	25.47	26.69	15.84	17.36	21.33	23.15	19.68	22.25	15.90	17.42
Corundum	1.31	0.88	0.50	0.36	0.65	0.45	2.29	1.55	0.40	0.27	0.03	0.02	1.67	1.14	2.48	1.67	3.92	2.76	1.21	0.85	6.45	4.69	2.68	1.89
Diopside	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthene	1.71	1.22	11.61	8.96	6.55	4.90	2.46	1.78	1.39	0.95	12.45	9.65	3.36	2.46	1.85	1.32	9.05	7.10	7.37	5.63	12.42	9.99	9.35	7.38
Ilmenite	0.15	0.09	0.95	0.56	0.57	0.33	0.30	0.17	0.09	0.05	1.06	0.63	0.47	0.27	0.11	0.06	0.82	0.48	0.91	0.53	1.04	0.64	0.80	0.47
Apatite	0.07	0.06	0.35	0.30	0.37	0.32	0.16	0.14	0.02	0.02	0.42	0.37	0.30	0.26	0.49	0.41	0.39	0.35	0.35	0.30	0.05	0.04	0.16	0.14
Zircon	0.01	0.01	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.03	0.02	0.03	0.02	0.03	0.02
Total	98.98	100.02	98.15	100.00	97.86	100.00	98.69	100.01	99.20	99.99	98.08	100.01	98.30	100.00	99.05	99.99	98.00	100.00	97.84	100.01	96.71	99.99	97.79	99.99

Note: Calculated after Johannsen (1931) using the program of Kurt Hollocher, Geology Department, Union College, Schenectady, NY, 12308.

TABLE DR10. HF-ISOTOPE DATA

sample	$^{176}\text{Hf}/^{177}\text{Hf}$	2σ	$^{176}\text{Lu}/^{177}\text{Hf}$	2σ	$^{178}\text{Hf}/^{177}\text{Hf}$	2σ	Lu ppm 176	2σ	Yb ppm 176	2σ	Hf ppm	ϵ_{Hf}	1 S.E.
<u>6814E1G (305 Ma)</u>													
	0.282497	0.000045	0.000953	0.000005	1.467310	0.000057	2944	11	123400	1200	11268	-3.2	1.6
	0.282458	0.000049	0.001195	0.000007	1.467230	0.000033	3599	17	145261	780	11070	-4.6	1.7
	0.282456	0.000061	0.000688	0.000005	1.467290	0.000046	2217	15	87649	110	10575	-4.6	2.2
	0.282408	0.000041	0.001000	0.000005	1.467270	0.000052	3087	12	124624	990	10410	-6.3	1.5
	0.282512	0.000039	0.000509	0.000002	1.467330	0.000051	1680	7	65460	160	8840	-2.6	1.4
	0.282399	0.000056	0.001313	0.000002	1.467340	0.000040	3907	6	154269	440	9171	-6.7	2.0
	0.282407	0.000038	0.001231	0.000041	1.467270	0.000052	3647	98	156163	5300	9228	-6.4	1.3
	0.282431	0.000053	0.001149	0.000008	1.467330	0.000048	3454	18	146559	1400	11073	-5.6	1.9
	0.282509	0.000051	0.001040	0.000013	1.467280	0.000056	3194	37	128218	750	9771	-2.8	1.8
	0.282480	0.000050	0.000865	0.000008	1.467190	0.000048	2719	20	108509	1400	8817	-3.8	1.8
	0.282433	0.000060	0.001810	0.000120	1.467310	0.000082	5145	280	208925	11000	7642	-5.6	2.1
	0.282459	0.000068	0.000810	0.000004	1.467230	0.000068	2556	11	105017	440	10747	-4.5	2.4
	0.282512	0.000065	0.001197	0.000012	1.467250	0.000054	3596	28	145467	1900	7584	-2.7	2.3
	0.282525	0.000048	0.001167	0.000068	1.467270	0.000099	3513	180	140817	6400	6724	-2.2	1.7
	0.282390	0.000057	0.001090	0.000006	1.467340	0.000078	3299	12	139119	1000	7290	-7.0	2.0
	0.282394	0.000057	0.001287	0.000006	1.467210	0.000061	3832	16	154746	680	7859	-6.9	2.0
	0.282435	0.000042	0.001156	0.000003	1.467410	0.000074	3484	6	142836	810	8478	-5.4	1.5
	0.282403	0.000044	0.000990	0.000011	1.467320	0.000051	3077	30	118725	560	7112	-6.5	1.6
	0.282500	0.000060	0.000515	0.000001	1.467410	0.000074	1689	1	70988	330	7680	-3.0	2.1
	0.282489	0.000054	0.000945	0.000004	1.467330	0.000037	2947	11	115206	1000	9167	-3.5	1.9
wtd. mean												-4.7	0.8
<u>6814F1 (295 Ma)</u>													
	0.282297	0.000070	0.001695	0.000001	1.467240	0.000075	4715	5	208871	280	12985	-10.6	2.5
	0.282458	0.000074	0.000535	0.000006	1.467310	0.000052	1746	17	75127	440	7331	-4.7	2.6
	0.282451	0.000063	0.001226	0.000003	1.467260	0.000083	3618	8	161951	380	13496	-5.1	2.2
	0.282433	0.000063	0.000959	0.000005	1.467300	0.000073	2945	12	128741	840	8124	-5.7	2.2
	0.282391	0.000057	0.000997	0.000019	1.467350	0.000052	3039	50	133603	1600	10258	-7.2	2.0
	0.282452	0.000047	0.000876	0.000004	1.467250	0.000033	2749	11	110205	630	8356	-5.0	1.7
	0.282388	0.000070	0.001795	0.000005	1.467340	0.000069	4944	16	218608	720	16427	-7.4	2.5
	0.282428	0.000045	0.001512	0.000010	1.467320	0.000047	4293	24	192514	1200	12919	-5.9	1.6

0.282339	0.000040	0.001669	0.000052	1.467280	0.000065	4644	110	206038	5500	12584	-9.1	1.4
0.282413	0.000060	0.001130	0.000025	1.467260	0.000049	3387	62	148066	3100	13134	-6.4	2.1
0.282386	0.000063	0.001661	0.000008	1.467310	0.000053	4652	14	203492	1500	14655	-7.5	2.2
0.282297	0.000077	0.002050	0.000013	1.467250	0.000066	5466	24	240639	1600	18631	-10.7	2.7
0.282322	0.000044	0.002041	0.000008	1.467280	0.000050	5474	20	236093	240	20137	-9.8	1.6
0.282492	0.000061	0.001189	0.000007	1.467310	0.000048	3549	17	151809	500	19158	-3.6	2.2
0.282387	0.000050	0.001985	0.000056	1.467350	0.000058	5334	110	232305	5700	18776	-7.5	1.8
0.282331	0.000059	0.001506	0.000006	1.467250	0.000052	4296	13	191026	860	10021	-9.4	2.1
0.282458	0.000080	0.000966	0.000028	1.467290	0.000068	2905	71	145027	4100	21394	-4.8	2.8
0.282519	0.000083	0.000622	0.000003	1.467270	0.000074	2014	9	82727	840	12360	-2.5	2.9
0.282342	0.000050	0.002028	0.000020	1.467360	0.000068	5396	36	242189	2200	13825	-9.1	1.8
0.282436	0.000079	0.001082	0.000006	1.467280	0.000089	3261	21	141267	410	9660	-5.6	2.8
wtd. mean											-7.2	0.9

6910C1 (301 Ma)

0.282516	0.000076	0.000460	0.000001	1.467320	0.000043	1528	4	60035	250	16571	-2.5	2.7
0.282456	0.000081	0.000493	0.000003	1.467240	0.000062	1627	9	64807	390	13180	-4.7	2.9
0.282454	0.000048	0.000719	0.000002	1.467270	0.000048	2300	7	93332	390	15938	-4.8	1.7
0.282497	0.000071	0.000384	0.000002	1.467340	0.000067	1288	5	49634	230	16634	-3.2	2.5
0.282615	0.000061	0.000415	0.000002	1.467300	0.000038	1385	6	53699	330	16805	1.0	2.2
0.282537	0.000060	0.000410	0.000002	1.467290	0.000045	1372	7	52125	310	16491	-1.8	2.1
0.282578	0.000065	0.000431	0.000001	1.467210	0.000041	1441	4	54386	110	15203	-0.3	2.3
0.282524	0.000041	0.000410	0.000002	1.467280	0.000059	1372	6	53212	140	15687	-2.2	1.5
0.282502	0.000046	0.000575	0.000002	1.467330	0.000059	1877	6	74841	290	16612	-3.1	1.6
0.282576	0.000062	0.000488	0.000006	1.467300	0.000037	1612	18	62632	720	16915	-0.4	2.2
0.282509	0.000046	0.000437	0.000002	1.467240	0.000033	1458	6	56492	270	16483	-2.8	1.6
0.282546	0.000041	0.000506	0.000001	1.467280	0.000025	1669	3	66246	140	15725	-1.5	1.5
0.282480	0.000045	0.000477	0.000001	1.467430	0.000050	1576	4	63018	220	13932	-3.8	1.6
0.282549	0.000061	0.000437	0.000001	1.467250	0.000065	1453	3	57490	140	15970	-1.4	2.2
0.282600	0.000053	0.000451	0.000000	1.467300	0.000073	1498	1	57940	72	15807	0.4	1.9
0.282549	0.000059	0.000467	0.000001	1.467280	0.000029	1550	4	60869	100	15405	-1.4	2.1
0.282571	0.000057	0.000519	0.000001	1.467360	0.000064	1711	3	66819	160	15316	-0.6	2.0
0.282463	0.000055	0.000522	0.000001	1.467250	0.000057	1718	2	67171	120	15743	-4.4	1.9
0.282535	0.000075	0.000625	0.000008	1.467440	0.000054	2022	22	81213	1500	15974	-1.9	2.7

	0.282514	0.000080	0.000485	0.000002	1.467270	0.000067	1604	4	63864	190	13261	-2.6	2.8
	0.282546	0.000060	0.000481	0.000006	1.467300	0.000049	1590	18	62766	560	13508	-1.5	2.1
wtd. mean												-2.1	0.9
<u>6910D1 (297 Ma)</u>													
	0.282467	0.000072	0.000677	0.000002	1.467280	0.000054	2172	5	90878	820	16860	-4.4	2.5
	0.282400	0.000077	0.000856	0.000003	1.467300	0.000074	2669	9	114938	590	14627	-6.8	2.7
	0.282512	0.000071	0.001003	0.000006	1.467310	0.000055	3082	13	127752	1600	18391	-2.9	2.5
	0.282426	0.000052	0.001209	0.000006	1.467270	0.000055	3602	15	154139	710	27446	-6.0	1.8
	0.282437	0.000078	0.001000	0.000024	1.467290	0.000065	3068	60	128248	3400	20741	-5.5	2.8
	0.282474	0.000087	0.000783	0.000007	1.467300	0.000068	2487	17	98971	1300	17891	-4.2	3.1
	0.282462	0.000078	0.001169	0.000016	1.467290	0.000063	3518	39	144633	2500	17691	-4.7	2.8
	0.282395	0.000090	0.001402	0.000008	1.467250	0.000089	4065	23	175898	260	20426	-7.1	3.2
	0.282464	0.000076	0.000722	0.000007	1.467270	0.000096	2304	20	95088	1400	17310	-4.5	2.7
	0.282428	0.000066	0.001355	0.000022	1.467250	0.000055	3971	57	166735	1400	20714	-5.9	2.3
	0.282303	0.000067	0.000120	0.000001	1.467320	0.000053	417	4	20911	320	15878	-10.1	2.4
	0.282389	0.000091	0.000111	0.000002	1.467250	0.000059	386	6	20755	490	16599	-7.0	3.2
	0.282431	0.000066	0.000983	0.000004	1.467200	0.000074	3031	14	124952	210	14139	-5.7	2.3
	0.282433	0.000090	0.000712	0.000001	1.467310	0.000062	2269	2	95429	710	14670	-5.6	3.2
	0.282451	0.000075	0.001248	0.000052	1.467190	0.000070	3688	130	157712	4700	12775	-5.1	2.7
	0.282513	0.000090	0.000656	0.000018	1.467190	0.000069	2107	54	88112	1700	13635	-2.8	3.2
	0.282440	0.000045	0.000606	0.000008	1.467230	0.000048	1964	24	82294	680	14226	-5.3	1.6
	0.282410	0.000065	0.000589	0.000002	1.467250	0.000074	1907	7	83142	190	13660	-6.4	2.3
	0.282417	0.000058	0.000318	0.000024	1.467340	0.000068	1069	76	46682	2700	15308	-6.1	2.1
wtd. mean												-5.7	1.1
GJ-1 (standard)													
GJ1	0.282019	0.000069	0.000262	0.000000	1.467150	0.000055	893	1	37305	170	6239		
GJ1	0.281999	0.000059	0.000263	0.000001	1.467120	0.000039	898	3	36460	100	6442		
GJ1	0.282020	0.000045	0.000260	0.000000	1.467210	0.000059	885	2	37499	110	6606		
GJ1	0.281955	0.000033	0.000260	0.000000	1.467190	0.000035	888	1	36560	100	6720		
GJ1	0.282086	0.000049	0.000261	0.000000	1.467310	0.000058	889	1	37141	130	6433		
GJ1	0.282011	0.000064	0.000261	0.000000	1.467280	0.000081	893	2	36771	130	6560		
GJ1	0.281974	0.000052	0.000259	0.000000	1.467360	0.000042	881	1	38778	110	7425		

Figure DR7. Geochemical classification of the Gissar-Alai range granitoids and the Garm-massif orthogneisses.

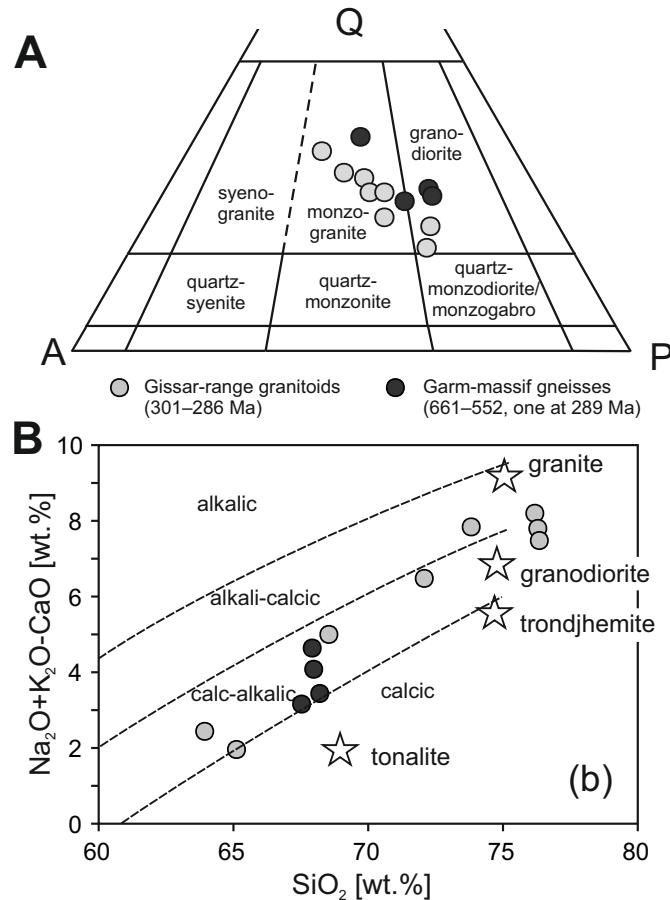


Figure DR8. Major elements versus SiO_2 trends of the Gissar-Alai range granitoids and the Garm-massif orthogneisses.

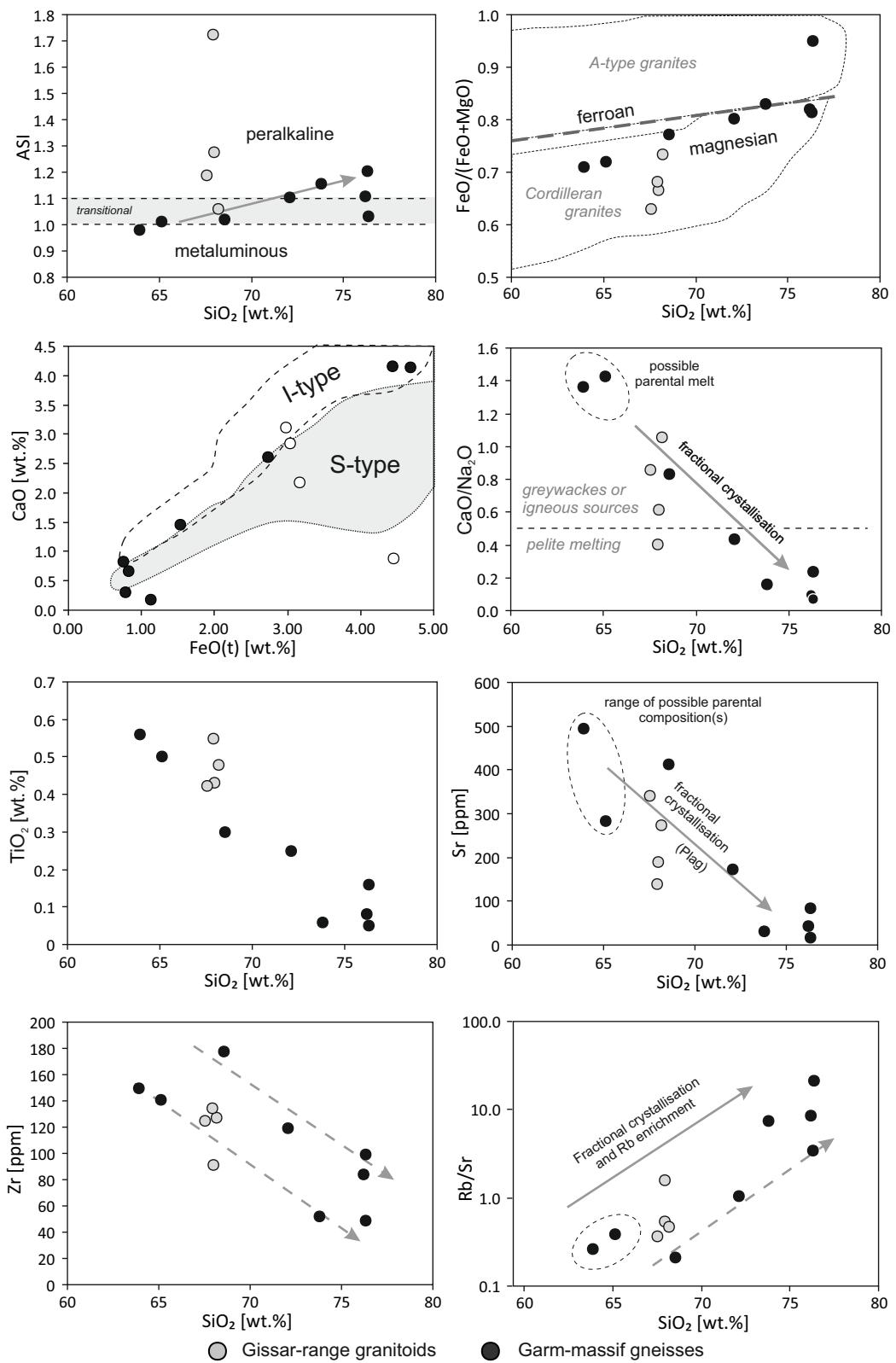


Figure DR9. Trace-element spider diagrams of Gissar-Alai range granitoids and the Garm-massif orthogneisses.

