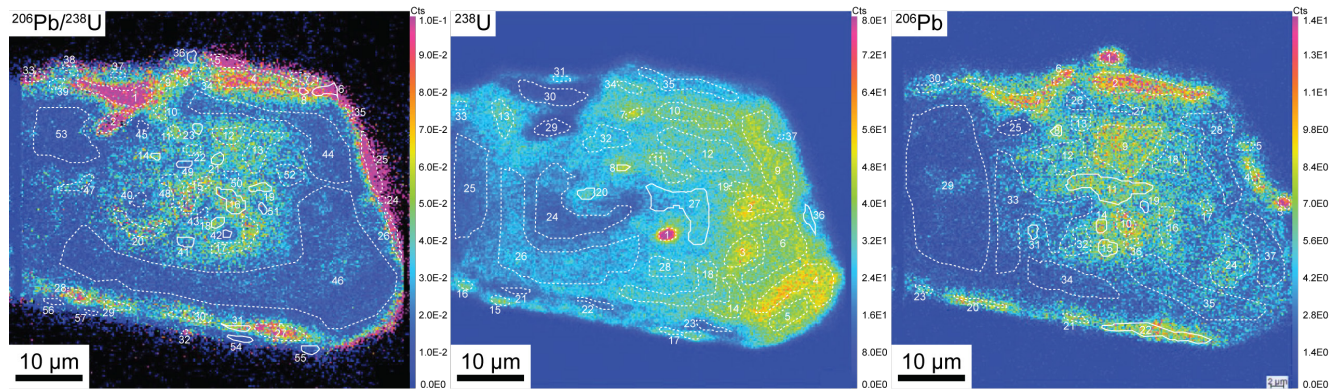
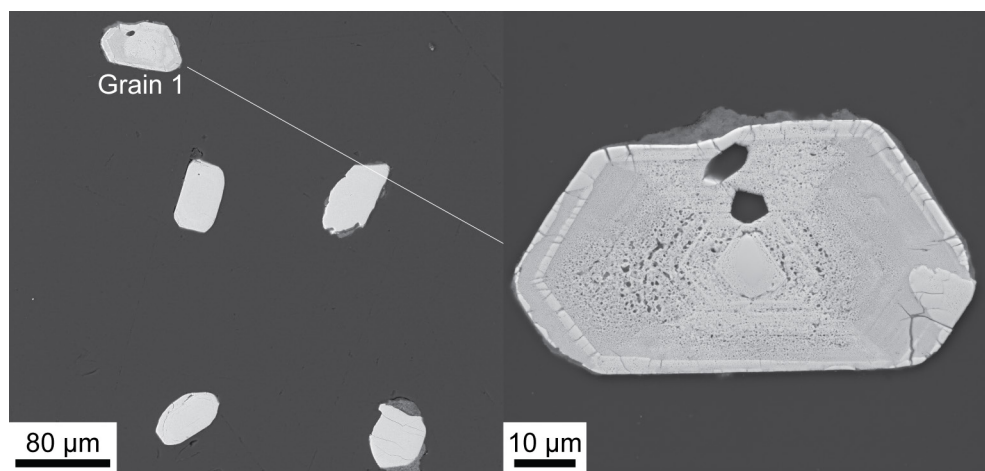


Item DR 6: SIMS ion imaging analyses - Suevitic breccia

Ion image 21 grain 1

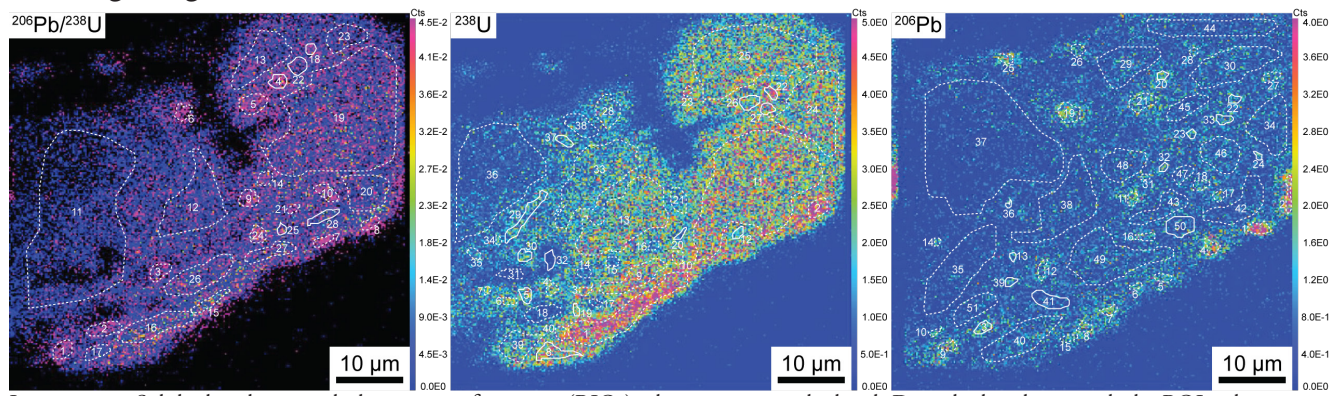


Ion imaging. Solid white lines mark the regions of interests (ROIs) where an age is calculated. Dotted white lines mark the ROIs where it was not possible to calculate an age due to common Pb content higher than 2%, and high uncertainty, i.e., absolute error higher than age value.

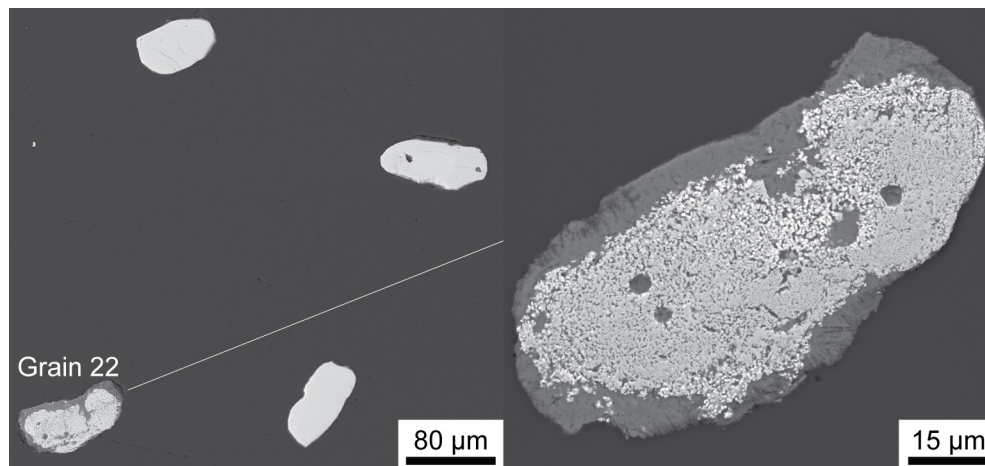


BSE images. Left) HV = 15 kV, WD = 9.94 mm, View Field = 301.0 µm. Right) HV = 15 kV, WD = 9.06 mm, View Field = 48.0 µm; close-up of the grain from the left image. Right image shows the grain after a further polishing to remove Au coating of the SIMS ion imaging and U-Pb spot analyses.

Ion image 22 grain 2



Ion imaging. Solid white lines mark the regions of interests (ROIs) where an age is calculated. Dotted white lines mark the ROIs where it was not possible to calculate an age due to common Pb content higher than 2%, and high uncertainty, i.e., absolute error higher than age value.



BSE images. Left) HV = 15 kV, WD = 10.06 mm, View Field = 445.0 μm. Right) HV = 15 kV, WD = 9.01 mm, View Field = 93.1 μm; close-up of the grain from the left image. Right image shows the grain after a further polishing to remove Au coating of the SIMS ion imaging and U-Pb spot analyses.

Area ID ¹	Area size [Pix-el]	Measured ratios ²				Uncorrected ratios				Corrected ratios ³				Age [Ma]					
		²⁰⁶ Pb/ ²⁰⁸ Pb	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²⁰⁸ Pb	$\pm\sigma$ [%]	²⁰⁶ Pb/ ²³⁸ U	$\pm\sigma$ [%]	²³⁸ U/ ²⁰⁶ Pb	$\pm\sigma$ [%]	²⁰⁶ Pb/ ²³⁸ U	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²³⁸ U	$\pm\sigma$ [%]	²⁰⁶ Pb/ ²³⁸ Pb	$\pm\sigma$ [%]	²³⁸ U/ ²⁰⁶ Pb	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²⁰⁶ Pb	$\pm\sigma$ [%]
<i>²⁰⁶Pb/²³⁸U</i>																			
4	85	0.0000E+00	0.0	1.5218E-01	28.7	4.4566E-01	18.8	8.0971E-02	12.7	1.9485E+00	12.5	1.3248E+01	20.1	1.5218E-01	20.1	1.5218E-01	28.7	0.0	469.1
18	43	0.0000E+00	0.0	1.0811E-01	52.6	3.7838E-01	31.4	6.2805E-02	19.3	2.1305E+00	17.9	1.7756E+01	20.0	1.0811E-01	20.0	1.0811E-01	52.6	0.0	353.2
22	109	0.0000E+00	0.0	4.0741E-01	25.3	7.2222E-01	21.0	3.5932E-02	15.0	2.3810E+00	11.6	3.0920E+01	19.4	4.0741E-01	19.4	4.0741E-01	25.3	0.0	205.2
25	32	0.0000E+00	0.0	2.9412E-01	50.9	5.2942E-01	41.2	3.1421E-02	26.5	2.0001E+00	18.3	3.9116E+01	41.2	2.9412E-01	41.2	2.9412E-01	50.9	0.0	162.7
28	101	0.0000E+00	0.0	2.1053E-01	38.9	2.8948E-01	34.2	2.0723E-02	17.2	2.5851E+00	10.8	5.3105E+01	24.4	2.1053E-01	24.4	2.1053E-01	38.9	0.0	120.3
<i>²⁰⁷Pb</i>																			
8	163	0.0000E+00	0.0	3.2395E-01	24.0	8.7325E-01	17.4	2.5843E-02	12.8	4.6635E+00	11.1	3.0613E+01	46.5	3.2395E-01	46.5	3.2395E-01	24.0	0.0	207.2
12	38	0.0000E+00	0.0	9.4119E-01	34.8	1.8235E+00	30.2	4.7134E-02	27.5	3.0000E+00	25.8	2.3538E+01	39.4	9.4119E-01	39.4	9.4119E-01	34.8	0.0	268.2
19	28	0.0000E+00	0.0	2.7273E-01	65.1	8.1819E-01	45.0	2.4727E-02	32.3	4.6253E+00	27.6	4.4424E+01	85.5	2.7273E-01	85.5	2.7273E-01	65.1	0.0	143.5
20	25	0.0000E+00	0.0	2.4546E+00	35.8	4.5456E+00	33.3	9.1495E-02	37.5	1.4286E+00	34.8	1.2737E+01	51.8	2.4546E+00	51.8	2.4546E+00	35.8	0.0	487.2
22	44	0.0000E+00	0.0	1.1111E-01	74.5	6.1116E-01	38.3	1.8598E-02	24.9	2.8244E+00	15.4	5.0657E+01	37.3	1.1111E-01	37.3	1.1111E-01	74.5	0.0	136.0
26	97	0.0000E+00	0.0	3.1708E-01	31.8	8.2930E-01	23.2	3.1723E-02	17.0	2.2873E+00	12.4	3.4043E+01	27.2	3.1708E-01	27.2	3.1708E-01	31.8	0.0	186.6
27	57	0.0000E+00	0.0	3.4483E-01	36.7	1.0345E+00	26.0	2.5956E-02	20.0	2.9999E+00	14.7	4.7747E+01	37.9	3.4483E-01	37.9	3.4483E-01	36.7	0.0	133.6
29	189	0.0000E+00	0.0	6.1765E-01	27.8	1.2941E+00	22.8	2.1922E-02	18.2	1.9546E+00	10.8	4.1621E+01	44.0	6.1765E-01	44.0	6.1765E-01	27.8	0.0	153.1
30	57	0.0000E+00	0.0	6.6667E-01	52.7	8.8890E-01	48.6	1.8038E-02	35.1	2.2430E+00	19.7	3.5655E+01	108.8	6.6667E-01	108.8	6.6667E-01	52.7	0.0	178.3
32	64	0.0000E+00	0.0	6.6667E-01	30.4	2.0000E+00	23.6	8.9832E-02	48.7	6.2500E-01	57.0	1.1322E+00	74.1	6.6667E-01	74.1	6.6667E-01	30.4	0.0	4080.5
37	56	0.0000E+00	0.0	4.0000E-01	83.7	1.4000E+00	58.5	9.4515E-03	46.0	2.1465E+00	18.9	8.8380E+01	66.4	4.0000E-01	66.4	4.0000E-01	83.7	0.0	72.5
<i>²⁰⁶Pb</i>																			
3	60	0.0000E+00	0.0	1.7391E-01	27.1	6.3044E-01	16.8	1.6109E-01	14.6	2.1590E+00	18.2	4.5525E+00	77.6	1.7391E-01	77.6	1.7391E-01	27.1	0.0	1280.1
13	17	0.0000E+00	0.0	3.3334E-01	57.7	6.6667E-01	45.6	8.3177E-02	35.4	2.6667E+00	39.1	1.0109E+01	71.4	3.3334E-01	71.4	3.3334E-01	57.7	0.0	608.1
20	35	0.0000E+00	0.0	1.4583E-01	40.5	2.2917E-01	33.4	1.0646E-01	18.5	1.9232E+00	19.7	1.0640E+01	31.5	1.4583E-01	31.5	1.4583E-01	40.5	0.0	579.1
22	36	0.0000E+00	0.0	2.8128E-01	37.7	7.8126E-01	26.7	7.1937E-02	21.2	2.7403E+00	22.5	1.4370E+01	32.3	2.8128E-01	32.3	2.8128E-01	37.7	0.0	433.7
23	24	0.0000E+00	0.0	4.3999E-01	36.2	5.5999E-01	33.4	7.2965E-02	24.0	1.9655E+00	22.8	1.2995E+01	34.4	4.3999E-01	34.4	4.3999E-01	36.2	0.0	477.9
24	19	0.0000E+00	0.0	1.3333E-01	75.3	2.0000E-01	63.3	4.3767E-02	29.0	2.4788E+00	24.7	3.7996E+01	72.0	1.3333E-01	72.0	1.3333E-01	75.3	0.0	167.5
32	25	0.0000E+00	0.0	7.1429E-02	73.2	2.1429E-01	45.0	9.5051E-02	23.7	1.6898E+00	23.4	1.1888E+01	44.2	7.1429E-02	44.2	7.1429E-02	73.2	0.0	521.9
33	54	0.0000E+00	0.0	1.2245E-01	43.3	4.2858E-01	26.1	6.6271E-02	16.9	4.1000E+00	20.4	1.8847E+01	32.5	1.2245E-01	32.5	1.2245E-01	43.3	0.0	333.3
36	14	0.0000E+00	0.0	2.2222E-01	78.2	5.5556E-01	55.8	9.3575E-02	41.7	2.6667E+00	47.9	8.4719E+00	93.3	2.2222E-01	93.3	2.2222E-01	78.2	0.0	719.3
39	35	0.0000E+00	0.0	2.7273E-01	46.1	7.7274E-01	32.3	7.7868E-02	25.8	2.3500E+00	26.7	1.1512E+01	67.8	2.7273E-01	67.8	2.7273E-01	46.1	0.0	537.0
41	178	0.0000E+00	0.0	4.7369E-01	23.4	1.4211E+00	17.3	2.1846E-02	14.1	3.0143E+00	9.6	4.2628E+01	39.2	4.7369E-01	39.2	4.7369E-01	23.4	0.0	149.5
50	214	0.0000E+00	0.0	5.9001E-01	16.4	1.0000E+00	14.1	3.1565E-02	10.9	2.5708E+00	8.2	3.3797E+01	16.3	5.9001E-01	16.3	5.9001E-01	16.4	0.0	188.0

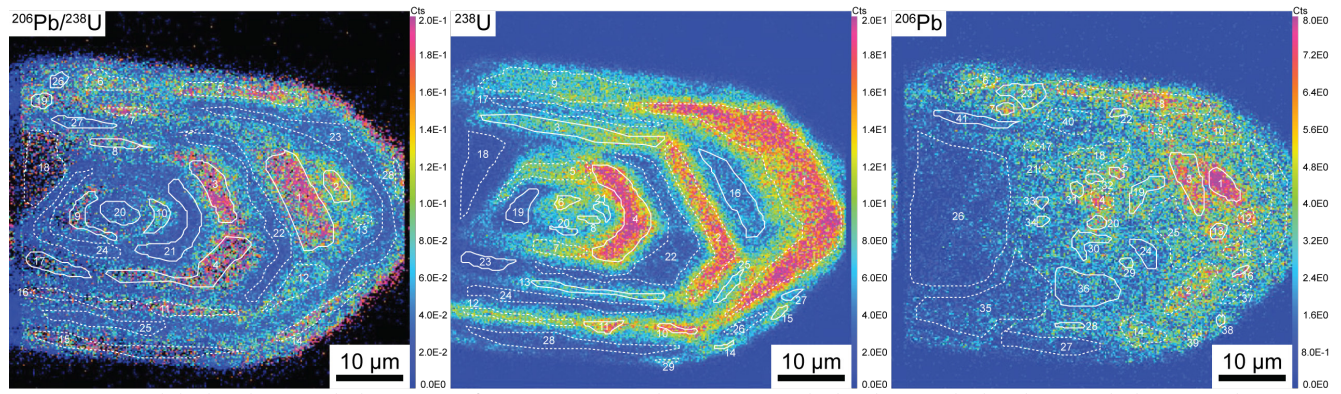
Area ID¹ corresponds to regions of interests (ROIs) used for calculation outlined in Figure above.

Measured ratios² are corrected to detector gains. Uncertainties are counting statistic (Poisson) errors.

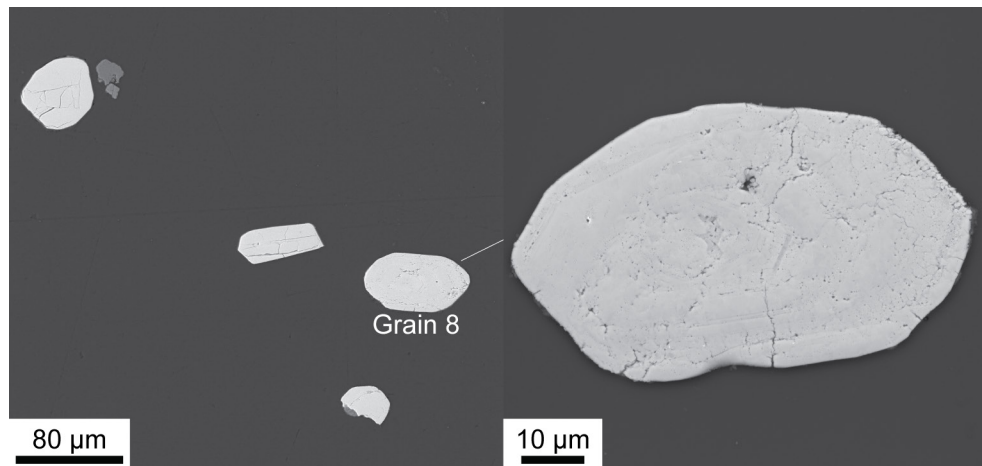
Corrected ratios³ Values corrected for common Pb where ²⁰⁶Pb exceeds detection limit.

²⁰⁶Pb [%]⁴ Percentage of common Pb in measured ²⁰⁶Pb, calculated from the ²⁰⁹Pb assuming present-day Stacey & Kramers (1975) model terrestrial Pb isotope composition.

Ion image 23 grain 8



Ion imaging. Solid white lines mark the regions of interests (RIOs) where an age is calculated. Dotted white lines mark the ROIs where it was not possible to calculate an age due to common Pb content higher than 2%, and high uncertainty, i.e., absolute error higher than age value.



BSE images. Left) HV = 15 kV, WD = 10.06 mm, View Field = 373.0 µm. Right) HV = 15 kV, WD = 9.01 mm, View Field = 79.2 µm; close-up of the grain from the left image. Right image shows the grain after a further polishing to remove Au coating of the SIMS ion imaging and U-Pb spot analyses.

Area ID ¹	Area size [PIX-el]	Measured ratios ²										Uncorrected ratios										Corrected ratios ³										Age [Ma]	
		²⁰⁶ Pb/ ²⁰⁸ Pb		²⁰⁶ Pb/ ²⁰⁷ Pb		²⁰⁶ Pb/ ²³² Th		²⁰⁶ Pb/ ⁹⁰ Zr		²³⁸ U/ ²⁰⁶ Pb		^{±σ} [%]		²⁰⁶ Pb/ ²⁰⁸ Pb		²⁰⁶ Pb/ ²⁰⁷ Pb		²⁰⁶ Pb/ ²³² Th		²⁰⁶ Pb/ ⁹⁰ Zr		²³⁸ U/ ²⁰⁶ Pb		^{±σ} [%]		²⁰⁶ Pb/ ²⁰⁸ Pb		²⁰⁶ Pb/ ²⁰⁷ Pb		²³⁸ U/ ²⁰⁶ Pb		^{±σ} [%]	
		±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	Value	±σ [%]	
5	56	0.0000E+00	0.0	4.9505E-02	0.0	7.7667E+00	6.9	7.2922E-02	14.1	7.2922E-02	6.9	7.7667E+00	11.3	1.6848E+01	31.7	4.9505E-02	26.5	0.0000	0.0000	1.6848E+01	31.7	4.9505E-02	26.5	0.0	371.7	87.6	171.8	617.4					
7	69	0.0000E+00	0.0	7.3846E-02	21.1	1.7846E-01	14.3	1.4225E-01	14.3	1.4225E-01	7.6	5.2784E+00	12.9	7.1590E+00	56.0	7.3846E-02	21.1	0.0000	0.0000	7.1590E+00	56.0	7.3846E-02	21.1	0.0	842.9	290.1	1037.3	4271.1					
13	87	0.0000E+00	0.0	1.0118E-01	16.0	1.9059E-01	12.1	1.8141E-01	12.1	1.8141E-01	6.3	5.1035E+00	10.1	9.6950E+00	17.6	1.0118E-01	16.0	0.0000	0.0000	9.6950E+00	17.6	1.0118E-01	16.0	0.0	632.8	90.6	1665.8	296.8					
16	38	0.0000E+00	0.0	1.2565E-01	21.7	3.1936E-01	14.7	6.0856E-02	8.5	1.4918E+01	17.5	1.4639E+01	21.2	1.2565E-01	21.2	1.2565E-01	21.7	0.0000	0.0000	1.4639E+01	21.2	1.2565E-01	21.7	0.0	426.0	72.6	2038.0	383.1					
19	254	0.0000E+00	0.0	9.6288E-02	11.5	3.1091E-01	7.0	5.2801E-02	3.9	7.2227E+00	3.9	7.2227E+00	5.5	2.1330E+01	11.8	9.6288E-02	11.5	0.0000	0.0000	2.1330E+01	11.8	9.6288E-02	11.5	0.0	295.4	30.5	1553.4	215.7					
20	89	0.0000E+00	0.0	5.7534E-02	22.4	1.9178E-01	13.1	6.2838E-02	8.1	7.6086E+00	9.4	7.6086E+00	9.4	1.5998E+01	24.8	5.7534E-02	22.4	0.0000	0.0000	1.5998E+01	24.8	5.7534E-02	22.4	0.0	390.9	75.8	512.1	493.1					
22	46	0.0000E+00	0.0	1.1875E-01	24.3	1.8750E-01	24.3	3.7502E-02	8.8	1.2875E+01	14.0	3.1580E+01	29.4	1.1875E-01	29.4	1.1875E-01	24.3	0.0000	0.0000	3.1580E+01	29.4	1.1875E-01	24.3	0.0	201.0	45.1	1937.5	434.3					
23	341	8.6579E-04	100.0	9.9567E-02	9.8	5.7143E-02	12.7	6.6473E-02	3.5	7.3738E+00	5.4	1.3586E+01	27.7	9.9567E-02	9.8	9.9567E-02	9.8	0.0162	0.0162	1.3586E+01	27.7	9.9567E-02	9.8	0.0	465.1	118.1	1370.5	351.2					
24	214	0.0000E+00	0.0	1.6082E-01	14.5	3.7720E-01	10.3	3.2135E-02	5.9	5.4475E+00	6.0	3.4664E+01	14.8	1.6082E-01	14.8	1.6082E-01	14.5	0.0000	0.0000	3.4664E+01	14.8	1.6082E-01	14.5	0.0	183.3	23.3	2464.3	245.5					
28	64	0.0000E+00	0.0	4.7338E-02	36.2	1.3018E-01	22.7	3.7030E-02	8.5	1.3804E+01	15.7	8.8808E+00	29.6	4.7338E-02	36.2	4.7338E-02	36.2	0.0000	0.0000	2.6059E+01	36.5	4.7338E-02	36.2	0.0	242.7	64.1	66.3	861.2					
29	43	0.0000E+00	0.0	7.5631E-02	34.6	9.2437E-02	31.5	1.3843E-01	12.4	2.5089E+00	15.7	8.8808E+00	29.6	7.5631E-02	34.6	7.5631E-02	34.6	0.0000	0.0000	8.8808E+00	29.6	7.5631E-02	34.6	0.0	687.8	150.7	1085.3	693.1					
30	203	0.0000E+00	0.0	8.4871E-02	15.4	2.9152E-01	9.0	4.7047E-02	4.9	7.9189E+00	6.8	2.0796E+01	19.5	8.4871E-02	15.4	8.4871E-02	15.4	0.0000	0.0000	2.0796E+01	19.5	8.4871E-02	15.4	0.0	302.8	48.5	1312.6	298.0					
31	82	0.0000E+00	0.0	1.4780E-01	15.6	2.6729E-01	18.2	1.7494E-01	18.2	1.7494E-01	9.6	2.5977E+00	13.0	6.0894E+00	32.4	1.4780E-01	15.6	0.0000	0.0000	2.1749E+01	33.5	1.4780E-01	15.6	0.0	289.8	71.6	2320.6	268.0					
32	55	0.0000E+00	0.0	1.2946E-01	19.7	1.5625E-01	19.7	1.5625E-01	19.7	1.5625E-01	19.7	1.5625E-01	19.7	1.2946E-01	19.7	1.2946E-01	19.7	0.0000	0.0000	6.0894E+00	32.4	1.2946E-01	19.7	0.0	980.2	226.5	2090.7	347.0					
33	52	0.0000E+00	0.0	1.3103E-01	24.4	1.6552E-01	22.0	5.9847E-02	9.7	5.5980E+00	12.8	1.9249E+01	34.7	1.3103E-01	34.7	1.3103E-01	24.4	0.0000	0.0000	1.9249E+01	34.7	1.3103E-01	24.4	0.0	326.5	82.5	2111.9	427.9					
34	45	0.0000E+00	0.0	4.6154E-02	41.8	1.1538E-01	27.3	6.2499E-02	10.3	8.8725E+00	16.9	1.4064E+01	35.8	4.6154E-02	41.8	4.6154E-02	41.8	0.0000	0.0000	1.4064E+01	35.8	4.6154E-02	41.8	0.0	442.8	113.8	5.6	1005.5					
36	840	6.5316E-04	100.0	9.4710E-02	8.7	2.4755E-01	5.7	5.8650E-02	3.0	4.2079E+00	3.5	1.7854E+01	11.6	9.4710E-02	8.7	9.4710E-02	8.7	0.0122	0.0122	1.7656E+01	24.9	8.5547E-02	14.7	1.2	355.5	69.3	1328.0	284.1					
38	30	0.0000E+00	0.0	2.0833E-02	71.4	6.2500E-02	42.1	1.2476E-01	13.5	1.4232E+01	34.5	7.7589E+00	29.6	2.0833E-02	71.4	2.0833E-02	71.4	0.0000	0.0000	7.7589E+00	29.6	2.0833E-02	71.4	0.0	781.5	170.4	#NUM!	#NUM!					
41	281	0.0000E+00	0.0	1.3480E-01	16.3	4.2007E-01	10.3	2.5744E-02	6.0	7.2583E+00	6.3	3.5197E+01	42.4	1.3480E-01	42.4	1.3480E-01	16.3	0.0000	0.0000	3.5197E+01	42.4	1.3480E-01	16.3	0.0	180.6	53.3	2161.4	283.4					

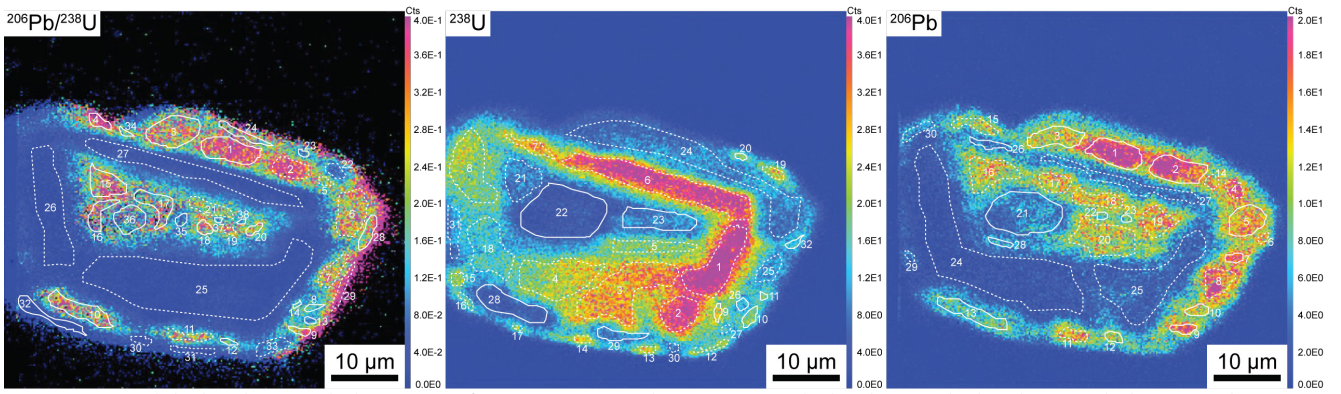
Area ID¹ corresponds to regions of interests (ROIs) used for calculation outlined in Figure above.

Measured ratios² are corrected for detector gains. Uncertainties are counting statistic (Poisson) errors.

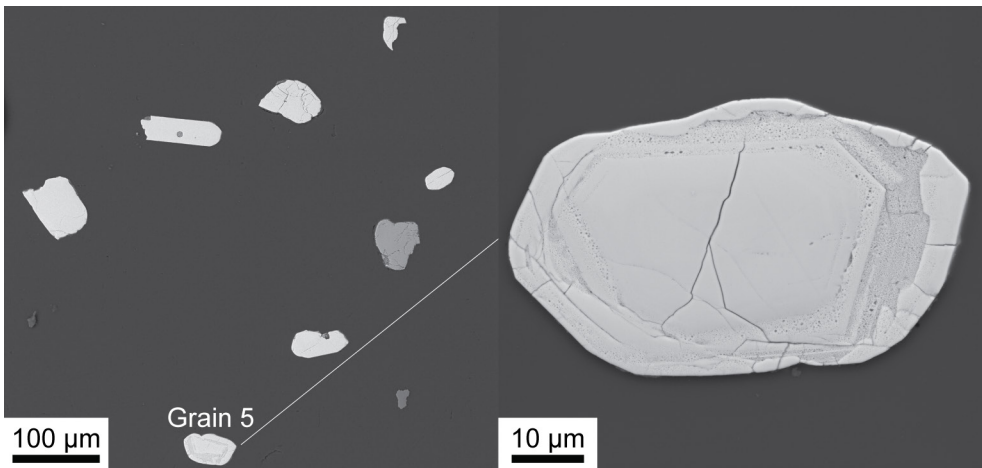
Corrected ratios³ Values corrected for common Pb where ²⁰⁶Pb exceeds detection limit.

²⁰⁶Pb [%]⁴ Percentage of common Pb in measured ²⁰⁶Pb, calculated from the ²⁰⁴Pb assuming present-day Stacey & Kramers (1975) model terrestrial Pb isotope composition.

Ion image 24 grain 5



Ion imaging. Solid white lines mark the regions of interests (RIOs) where an age is calculated. Dotted white lines mark the ROIs where it was not possible to calculate an age due to common Pb content higher than 2%, and high uncertainty, i.e., absolute error higher than age value.



BSE images. Left) HV = 15 kV, WD = 10.06 mm, View Field = 373.0 µm. Right) HV = 15 kV, WD = 9.01 mm, View Field = 79.2 µm; close-up of the grain from the left image. Right image shows the grain after a further polishing to remove Au coating of the SIMS ion imaging and U-Pb spot analyses.

Area ID ¹	Area size [Pix-el]	Measured ratios ²				Uncorrected ratios				Corrected ratios ³				Age [Ma]												
		²⁰⁶ Pb/ ²⁰⁴ Pb	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²⁰⁴ Pb	$\pm\sigma$ [%]	²⁰⁶ Pb/ ²³⁸ U	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²³⁸ U	$\pm\sigma$ [%]	²⁰⁶ Pb/ ²⁰⁴ Pb	$\pm\sigma$ [%]	²⁰⁷ Pb/ ²⁰⁴ Pb	$\pm\sigma$ [%]	²³⁸ U/ ²⁰⁶ Pb	$\pm 1\sigma$	²⁰⁷ Pb/ ²⁰⁶ Pb	$\pm 1\sigma$									
1	484	9.4725E-04	31.6	9.7853E-02	3.3	3.3154E-02	5.4	3.7938E-01	1.8	7.4301E+00	4.3	2.9354E+00	11.1	9.7853E-02	3.3	0.0177	0.0056	2.8834E+00	11.0	8.4546E-02	6.4	1.8	1919.4	166.5	1305.2	124.9
2	478	9.4323E-04	33.3	1.0019E-01	3.4	6.0053E-02	4.3	3.3375E-01	1.8	8.1295E+00	4.4	3.4210E+00	12.0	1.0019E-01	3.4	0.0176	0.0059	3.3607E+00	11.9	8.6987E-02	6.6	1.8	1679.2	159.4	1360.2	126.8
3	368	8.8316E-04	50.0	1.1592E-01	4.6	3.1132E-02	8.6	2.7383E-01	2.4	6.6298E+00	5.3	3.6652E+00	29.2	1.1592E-01	4.6	0.0165	0.0083	3.6047E+00	28.9	1.0383E-01	8.0	1.7	1578.3	321.8	1693.7	147.1
5	369	7.4139E-04	50.0	1.0472E-01	4.4	1.1863E-01	4.2	2.8103E-01	2.2	8.7497E+00	5.5	3.8140E+00	19.7	1.0472E-01	4.4	0.0139	0.0069	3.7612E+00	19.6	9.4445E-02	7.5	1.4	1519.8	225.9	1517.0	141.2
7	62	9.0903E-04	100.1	6.9997E-02	11.8	8.6359E-02	10.7	5.4296E-01	6.2	8.8696E+00	17.1	2.1500E+00	18.5	6.9997E-02	11.8	0.0170	0.0170	2.1135E+00	18.5	5.6755E-02	28.3	1.7	2497.4	331.9	482.0	625.7
9	87	6.5227E-04	100.0	5.8706E-02	10.9	4.6312E-02	12.1	2.5623E-01	4.1	1.6054E+01	13.1	4.3073E+00	17.5	5.8706E-02	10.9	0.0122	0.0122	4.2547E+00	18.0	4.9110E-02	23.9	1.2	1360.8	190.4	153.1	561.0
10	83	0.0000E+00	0.0	9.6710E-02	10.5	1.3539E-01	9.0	1.3498E-01	4.2	1.1800E+01	10.0	8.5532E+00	19.0	9.6710E-02	10.5	0.0000	0.0000	8.5532E+00	19.0	9.6710E-02	10.5	0.0	712.8	108.7	1561.6	196.3
12	61	0.0000E+00	0.0	7.1753E-02	15.1	4.5801E-02	18.7	1.0648E-01	5.0	1.6507E+01	13.1	1.0929E+01	67.2	7.1753E-02	15.1	0.0000	0.0000	1.0929E+01	67.2	7.1753E-02	15.1	0.0	564.4	220.9	978.9	307.6
13	362	6.9806E-04	70.7	8.4816E-02	6.7	4.9912E-02	8.6	2.1641E-01	2.8	8.0085E+00	6.4	4.0314E+00	35.1	8.4816E-02	6.7	0.0131	0.0092	3.9787E+00	34.8	7.4884E-02	12.3	1.3	1445.4	343.4	1065.4	247.6
21	1076	2.1655E-04	100.0	1.3609E-01	4.3	3.0658E-01	3.0	1.8048E-01	2.1	3.0715E+00	3.1	4.9254E+00	23.3	1.3609E-01	4.3	0.0040	0.0040	4.9055E+00	23.3	1.3325E-01	4.9	0.4	1196.0	209.8	2141.2	85.0
22	31	0.0000E+00	0.0	1.6370E-01	15.9	3.5231E-01	11.7	1.6873E-01	8.5	4.3976E+00	14.0	5.8383E+00	39.5	1.6370E-01	15.9	0.0000	0.0000	5.8383E+00	39.5	1.6370E-01	15.9	0.0	1019.2	272.7	2494.2	268.0
23	28	0.0000E+00	0.0	2.1491E-01	15.8	6.3159E-01	10.6	1.3994E-01	9.0	7.3257E+00	17.5	8.8150E+00	37.5	2.1491E-01	15.8	0.0000	0.0000	8.8150E+00	37.5	2.1491E-01	15.8	0.0	692.7	181.5	2943.0	254.4
26	100	0.0000E+00	0.0	1.6307E-01	13.1	3.1655E-01	10.0	3.0655E-02	5.3	2.5089E+01	10.6	3.3512E+01	52.4	1.6307E-01	13.1	0.0000	0.0000	3.3512E+01	52.4	1.6307E-01	13.1	0.0	189.5	64.5	2487.7	220.4
28	57	0.0000E+00	0.0	6.7961E-02	22.5	1.8770E-01	14.3	1.1707E-01	7.4	8.4444E+00	14.7	6.8778E+00	81.2	6.7961E-02	22.5	0.0000	0.0000	6.8778E+00	81.2	6.7961E-02	22.5	0.0	875.1	377.5	867.4	467.5

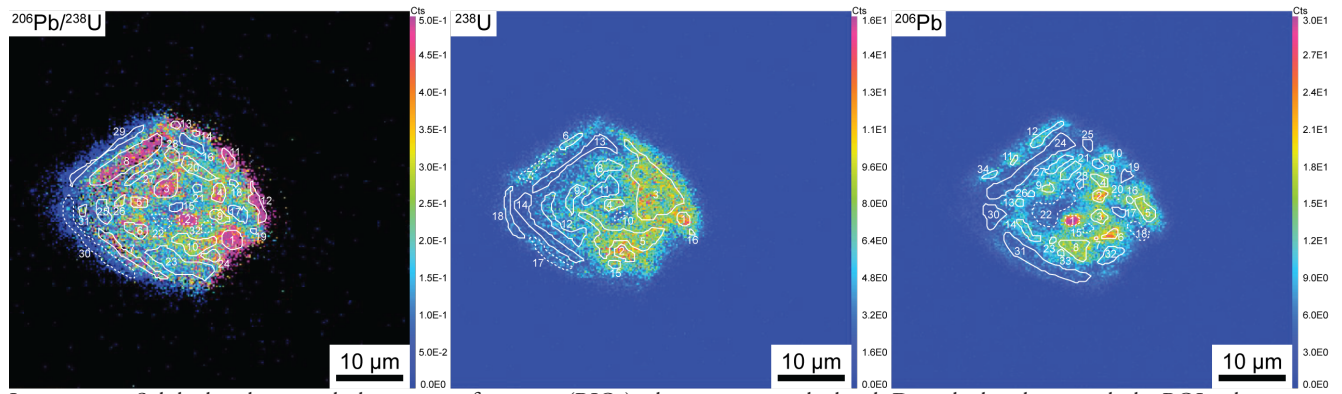
Area ID¹ corresponds to regions of interests (ROIs) used for calculation outlined in Figure above.

Measured ratios² are corrected to detector gains. Uncertainties are counting statistic (Poisson) errors.

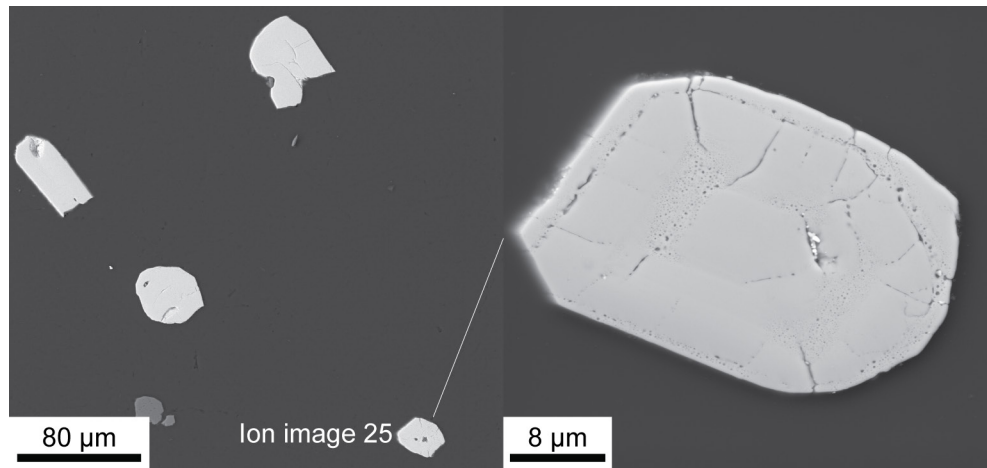
Corrected ratios³ Values corrected for common Pb where ²⁰⁴Pb exceeds detection limit.

²⁰⁶Pb [%]⁴ Percentage of common Pb in measured ²⁰⁶Pb, calculated from the ²⁰⁴Pb assuming present-day Stacey & Kramers (1975) model terrestrial Pb isotope composition.

Ion image 25



Ion imaging. Solid white lines mark the regions of interests (ROIs) where an age is calculated. Dotted white lines mark the ROIs where it was not possible to calculate an age due to common Pb content higher than 2%, and high uncertainty, i.e., absolute error higher than age value.



BSE images. Left) HV = 15 kV, WD = 10.06 mm, View Field = 332.0 μm . Right) HV = 15 kV, WD = 9.01 mm, View Field = 41.9 μm ; close-up of the grain from the left image. Right image shows the grain after a further polishing to remove Au coating of the SIMS ion imaging and U-Pb spot analyses.

Area ID ¹	Area size [Pix-el]	Measured ratios ²				Corrected ratios ³										Age [Ma]													
		$^{206}\text{Pb}/^{238}\text{U}$	$^{207}\text{Pb}/^{235}\text{U}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{238}\text{U}$	$^{207}\text{Pb}/^{235}\text{U}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{238}\text{U}$	$^{207}\text{Pb}/^{235}\text{U}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$^{206}\text{Pb}/^{238}\text{U}$	$^{207}\text{Pb}/^{235}\text{U}$	$^{206}\text{Pb}/^{207}\text{Pb}$	$\pm 1\sigma$												
28	21	0.0000E+00	0.0	2.3179E-01	18.8	8.3447E-01	12.1	1.3952E-01	11.0	6.2075E+00	20.0	9.7179E+00	46.7	2.3179E-01	46.7	2.3179E-01	18.8	0.0	0.0000	0.0000	9.7179E+00	46.7	2.3179E-01	18.8	0.0	631.4	194.3	3064.5	299.9
29	34	0.0000E+00	0.0	9.6428E-02	20.1	6.0714E-02	25.0	1.6455E-01	8.4	6.4331E+00	16.2	7.3858E+00	31.8	9.6428E-02	31.8	9.6428E-02	20.1	0.0	0.0000	0.0000	7.3858E+00	31.8	9.6428E-02	20.1	0.0	818.6	188.2	1556.1	378.1
30	156	0.0000E+00	0.0	1.8532E-01	10.8	8.6056E-01	6.3	1.4298E-01	5.8	3.9385E+00	8.8	7.1862E+00	42.8	1.8532E-01	42.8	1.8532E-01	10.8	0.0	0.0000	0.0000	7.1862E+00	42.8	1.8532E-01	10.8	0.0	839.9	240.6	2701.1	178.8
31	460	4.8566E-04	100.0	1.5347E-01	6.0	3.7348E-01	4.2	1.7403E-01	3.2	4.1965E+00	5.1	5.3800E+00	17.4	1.5347E-01	17.4	1.5347E-01	6.0	0.0091	0.0091	0.0091	5.3311E+00	18.0	1.4722E-01	7.7	0.9	1108.2	157.0	2313.9	131.9
32	123	9.4515E-04	100.1	6.8997E-02	12.1	1.1531E-01	9.6	5.6589E-01	6.4	2.6356E+00	10.8	1.8790E+00	15.4	6.8997E-02	15.4	6.8997E-02	12.1	0.0177	0.0177	0.0177	1.8488E+00	15.5	5.5201E-02	30.1	1.8	2790.9	312.1	420.4	672.9
33	13	0.0000E+00	0.0	2.2641E-01	18.5	6.9811E-01	12.4	1.7626E-01	11.4	8.3371E+00	24.9	5.4766E+00	82.4	2.2641E-01	82.4	2.2641E-01	18.5	0.0000	0.0000	0.0000	5.4766E+00	82.4	2.2641E-01	18.5	0.0	1081.1	465.9	3026.8	296.1
34	31	0.0000E+00	0.0	4.8779E-02	27.4	7.3169E-02	22.6	6.5393E-01	13.1	2.0282E+00	20.4	1.7567E+00	86.5	4.8779E-02	86.5	4.8779E-02	27.4	0.0000	0.0000	0.0000	1.7567E+00	86.5	4.8779E-02	27.4	0.0	2904.8	1187.2	137.2	643.0

Area ID¹ corresponds to regions of interests (ROIs) used for calculation outlined in Figure above.

Measured ratios² are corrected for detector gains. Uncertainties are counting statistic (Poisson) errors.

Corrected ratios³ Values corrected for common Pb where ^{206}Pb exceeds detection limit.

^{206}Pb [%]⁴ Percentage of common Pb in measured ^{206}Pb , calculated from the ^{206}Pb assuming present-day Stacey & Kramers (1975) model terrestrial Pb isotope composition.