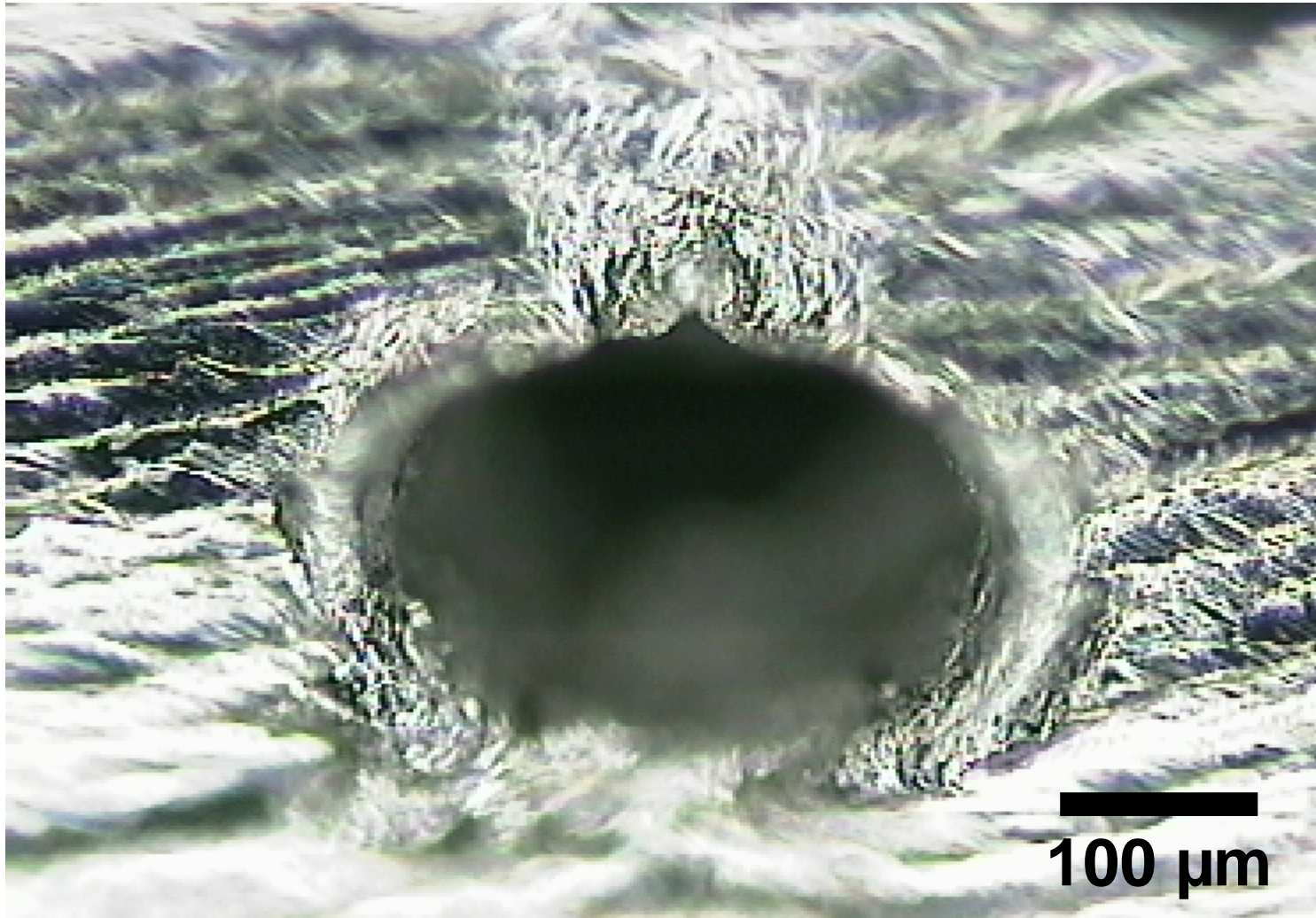


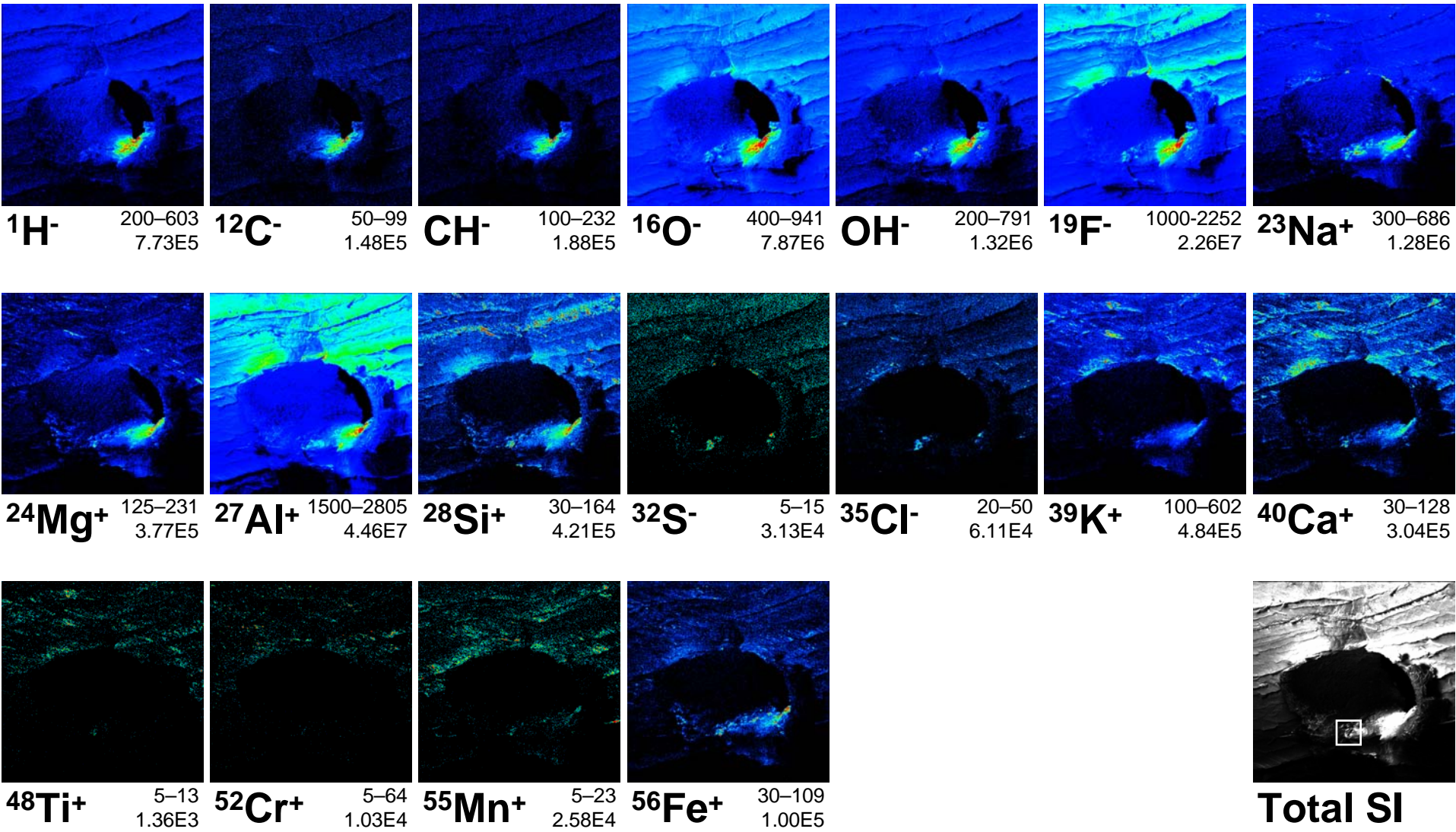
Sample C2086W, 1

- One large crater.
- Diameter ~390 μm (projectile penetrated the foil).
- Crater was analyzed in two orientations (second measurement after 180° rotation) because of large topographic effects.
- One small region was analyzed in more detail (only images shown).
- Plots show atomic element abundances relative to silicon and normalized to CI meteoritic abundances.
- Tables show atomic element abundances relative to silicon (not normalized to CI).
- All data are shown
 - without blank correction
 - with blank correction assuming Al/Si being chondritic (CI)
 - with blank correction attributing all Al to the foil
- Blank composition was determined from regions surrounding the crater.

Large crater on C2086W,1



C2086W,1 after Ar-sputtering

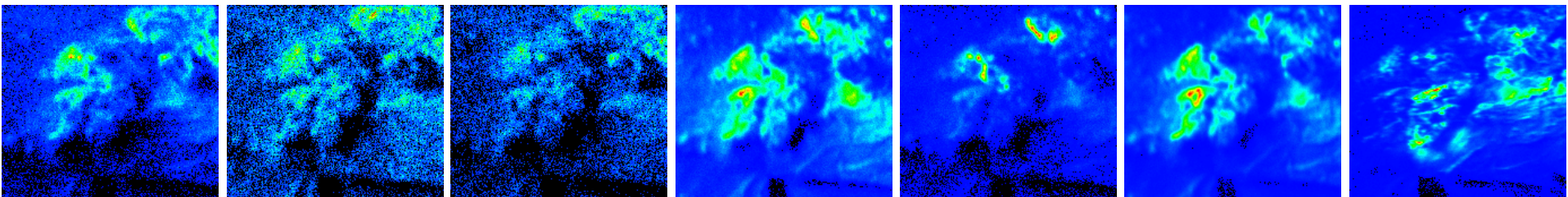


50 scans
512x512 pixels
32 shots/(pixelxscan)

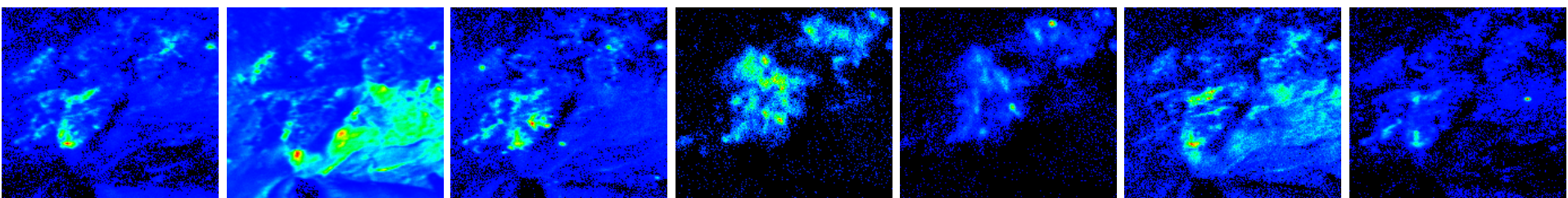


500x500 μm^2

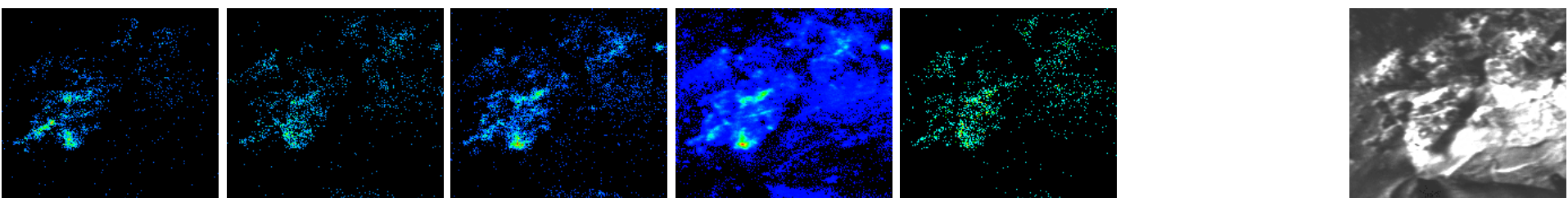
C2086W,1 detail after Ar-sputtering



$^1\text{H}^-$ 86 1.81E5 $^{12}\text{C}^-$ 20 6.14E4 CH^- 24 4.81E4 $^{16}\text{O}^-$ 632 2.31E6 OH^- 444 4.90E5 $^{19}\text{F}^-$ 2260 5.82E6 $^{23}\text{Na}^+$ 2425 4.52E6



$^{24}\text{Mg}^+$ 708 5.26E5 $^{27}\text{Al}^+$ 2899 9.59E6 $^{28}\text{Si}^+$ 314 2.95E5 $^{32}\text{S}^-$ 39 4.20E4 $^{35}\text{Cl}^-$ 173 5.45E4 $^{39}\text{K}^+$ 103 1.71E5 $^{40}\text{Ca}^+$ 494 1.07E5



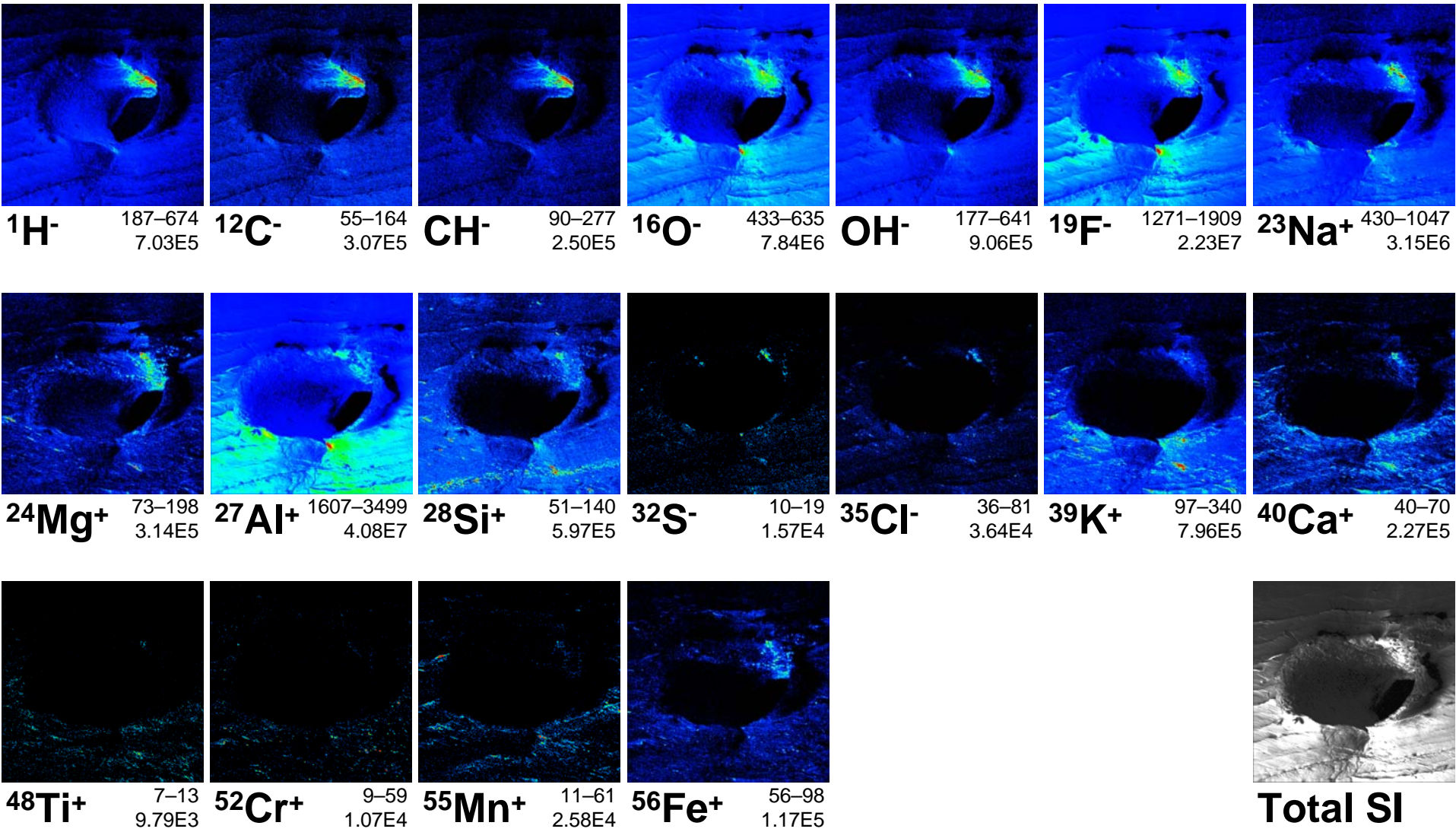
$^{48}\text{Ti}^+$ 11 2.67E3 $^{52}\text{Cr}^+$ 7 2.00E3 $^{55}\text{Mn}^+$ 16 6.25E3 $^{56}\text{Fe}^+$ 402 1.93E5 $^{58}\text{Ni}^+$ 4 1.81E3 Total SI

100 scans
171x192 pixels
64 shots/(pixelxscan)



53.4x60 μm^2

C2086W,1 after Ar-sputtering, sample rotated

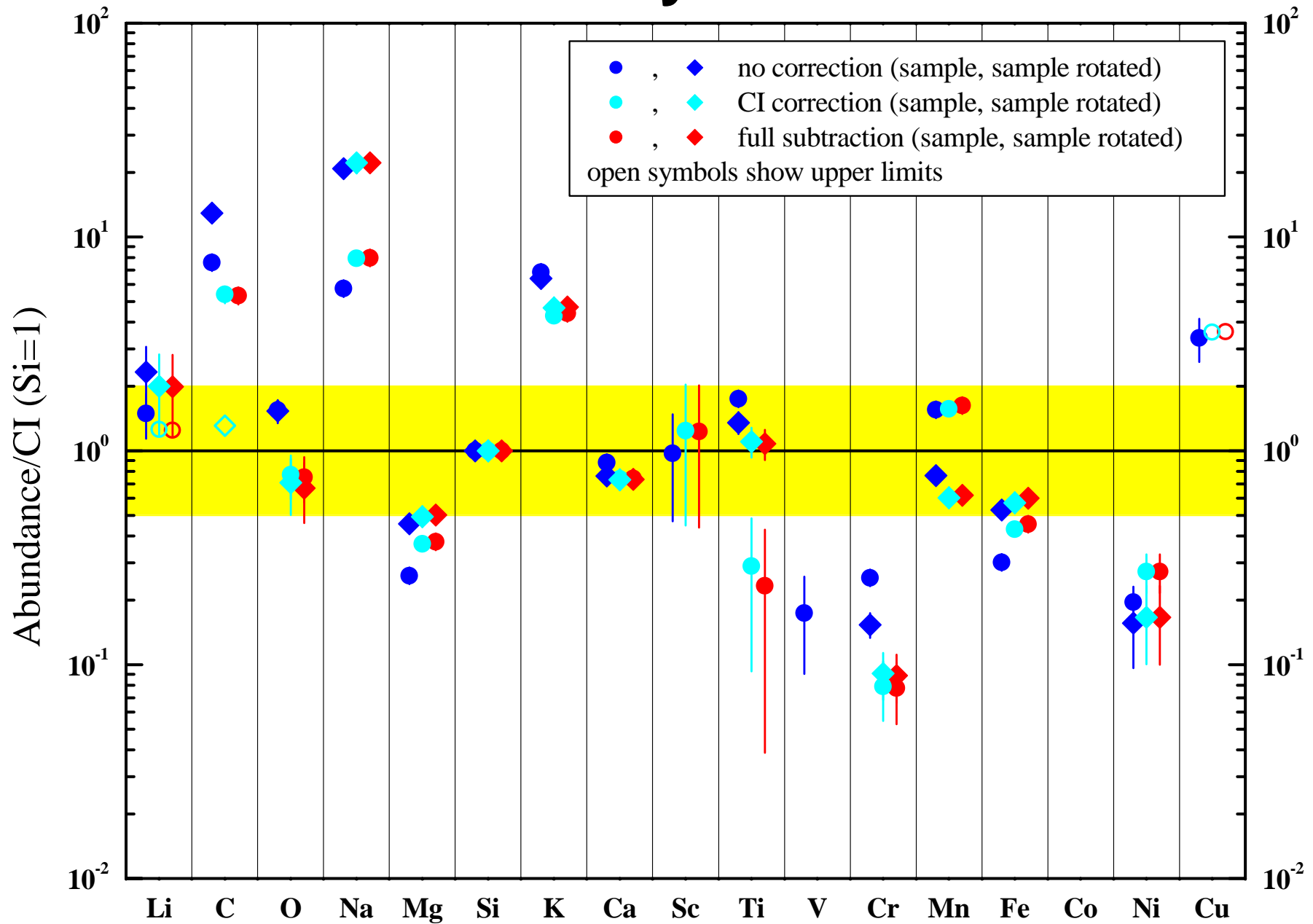


50 scans
512x512 pixels
32 shots/(pixelxscan)



500x500 μm^2

Bulk chemistry of crater rim



Bulk chemistry of crater rim

C2086W,1

	no correction		Cl correction		full subtraction	
	Abd./Si	Error	Abd./Si	Error	Abd./Si	Error
Li	0.00009	0.00002	<0.00007		<0.00007	
C	5.8	0.2	4.1	0.4	4.0	0.4
O	11.8	0.9	5.9	1.4	5.8	1.4
Na	0.330	0.001	0.455	0.001	0.457	0.007
Mg	0.274	0.002	0.386	0.002	0.395	0.007
Si	1.00	0.01	1.00	0.02	1.00	0.02
K	0.0254	0.0002	0.0159	0.0003	0.0163	0.0004
Ca	0.0537	0.0005	0.0452	0.0007	0.0452	0.0010
Sc	0.00003	0.00002	0.00004	0.00003	0.00004	0.00003
Ti	0.0043	0.0003	0.0007	0.0005	0.0006	0.0005
V	0.00005	0.00002				
Cr	0.0034	0.0002	0.0011	0.0003	0.0010	0.0003
Mn	0.0145	0.0004	0.0146	0.0007	0.0152	0.0008
Fe	0.259	0.003	0.369	0.004	0.390	0.008
Co						
Ni	0.010	0.002	0.013	0.003	0.013	0.003
Cu	0.001752	0.0004	<0.002		<0.002	

C2086W,1 (rotated)

	no correction		Cl correction		full subtraction	
	Abd./Si	Error	Abd./Si	Error	Abd./Si	Error
Li	0.00013	0.00004	0.00011	0.00005	0.00011	0.00005
C	9.8	0.5	<1.0			
O	11.8	1.4	5.4	1.6	5.1	1.6
Na	1.200	0.003	1.276	0.003	1.28	0.02
Mg	0.481	0.003	0.519	0.004	0.529	0.009
Si	1.00	0.01	1.00	0.01	1.00	0.02
K	0.0238	0.0003	0.0173	0.0004	0.0175	0.0005
Ca	0.0465	0.0008	0.0448	0.0008	0.045	0.001
Sc						
Ti	0.0033	0.0004	0.0027	0.0004	0.0026	0.0004
V						
Cr	0.0021	0.0003	0.0012	0.0003	0.0012	0.0003
Mn	0.0071	0.0005	0.0056	0.0006	0.0058	0.0006
Fe	0.455	0.006	0.492	0.006	0.52	0.01
Co						
Ni	0.008	0.003	0.008	0.003	0.008	0.003
Cu						