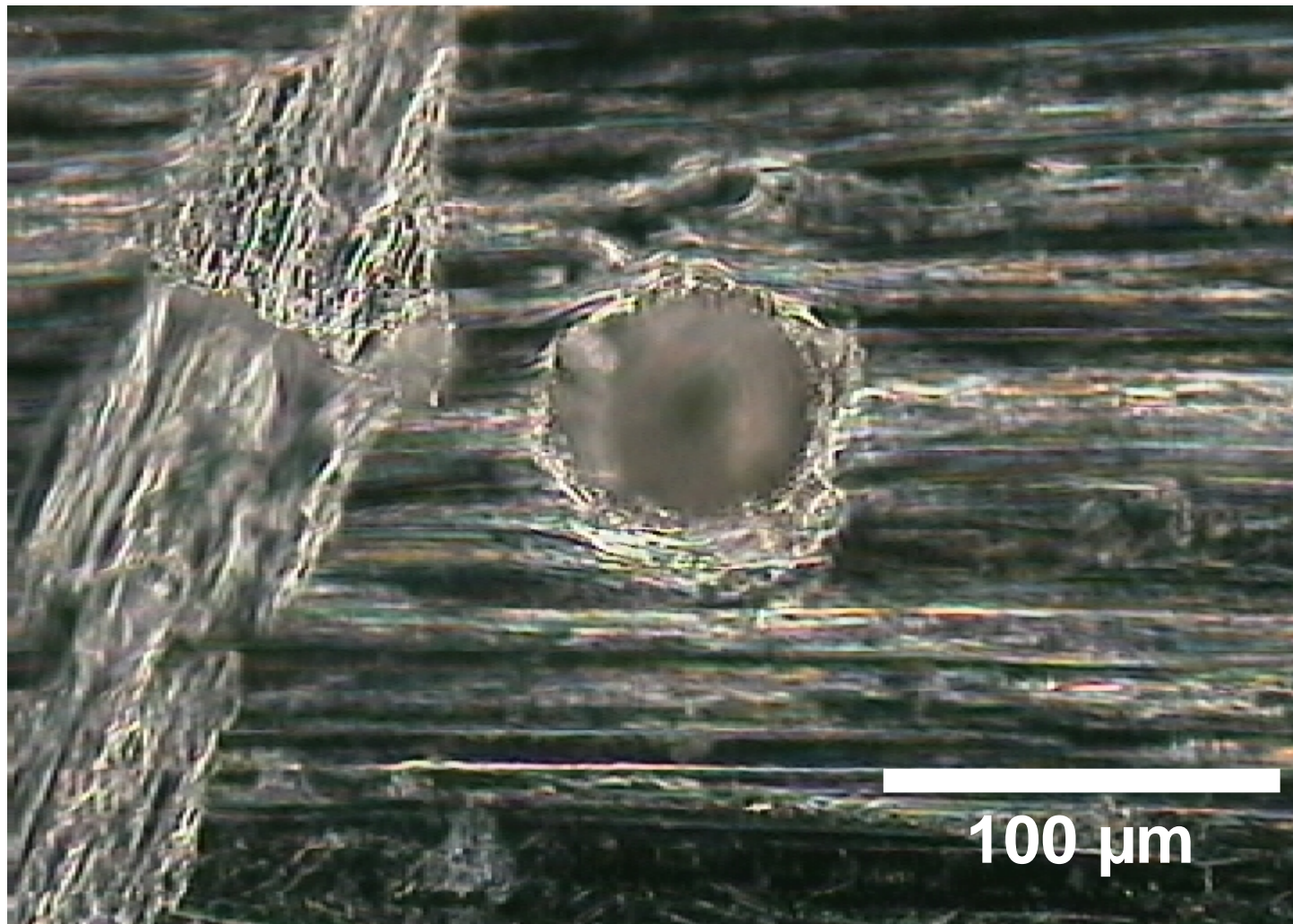


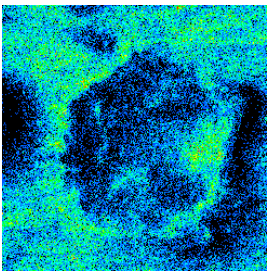
# Sample C2091N,1

- One large crater.
- Diameter ~60  $\mu\text{m}$ .
- One Ni,Cu-rich region was analyzed separately.
- 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.

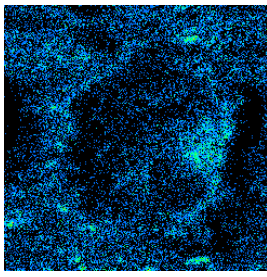
# Large crater on C2091N,1



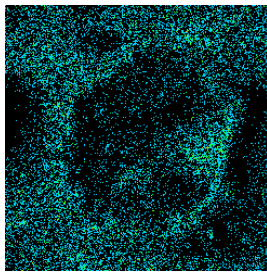
# C2091N,1 after Ar-sputtering



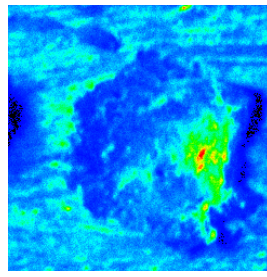
**$^1\text{H}^-$**  12-15  
1.17E5



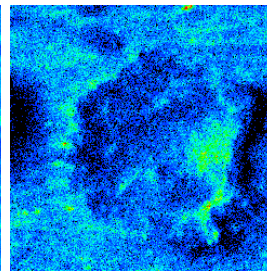
**$^{12}\text{C}^-$**  9  
2.53E4



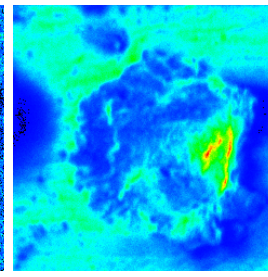
**$\text{CH}^-$**  5  
1.65E4



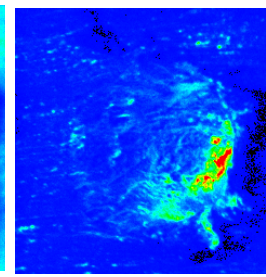
**$^{16}\text{O}^-$**  382-429  
3.60E6



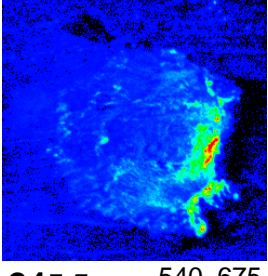
**$\text{OH}^-$**  25-29  
1.79E5



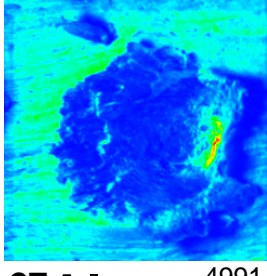
**$^{19}\text{F}^-$**  1199  
1.35E7



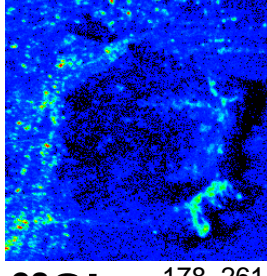
**$^{23}\text{Na}^+$**  911-1717  
2.95E6



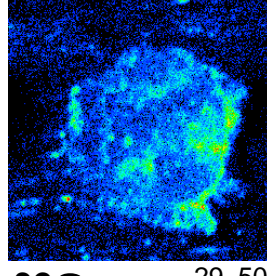
**$^{24}\text{Mg}^+$**  540-675  
1.26E6



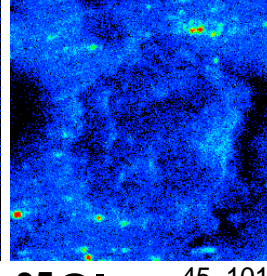
**$^{27}\text{Al}^+$**  4991  
4.84E7



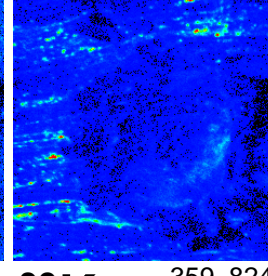
**$^{28}\text{Si}^+$**  178-261  
4.34E5



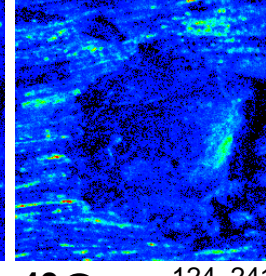
**$^{32}\text{S}^-$**  29-50  
1.09E5



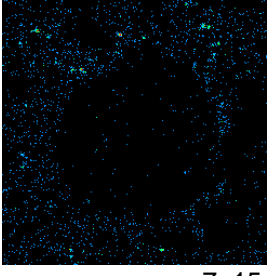
**$^{35}\text{Cl}^-$**  45-101  
1.54E5



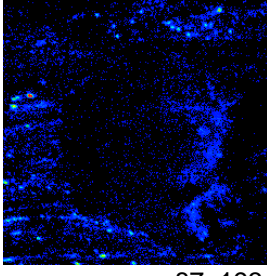
**$^{39}\text{K}^+$**  359-824  
6.05E5



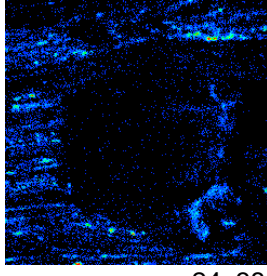
**$^{40}\text{Ca}^+$**  124-241  
3.76E5



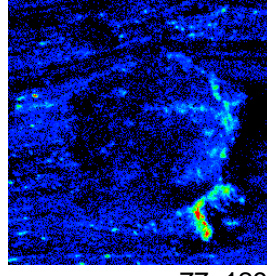
**$^{48}\text{Ti}^+$**  7-15  
2.73E3



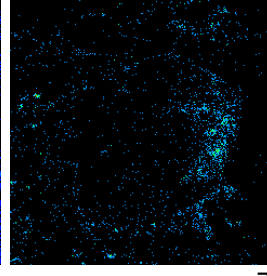
**$^{52}\text{Cr}^+$**  87-193  
2.58E4



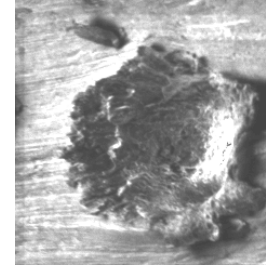
**$^{55}\text{Mn}^+$**  24-38  
1.89E4



**$^{56}\text{Fe}^+$**  77-129  
1.00E5



**$^{58}\text{Ni}^+$**  7  
2.68E3



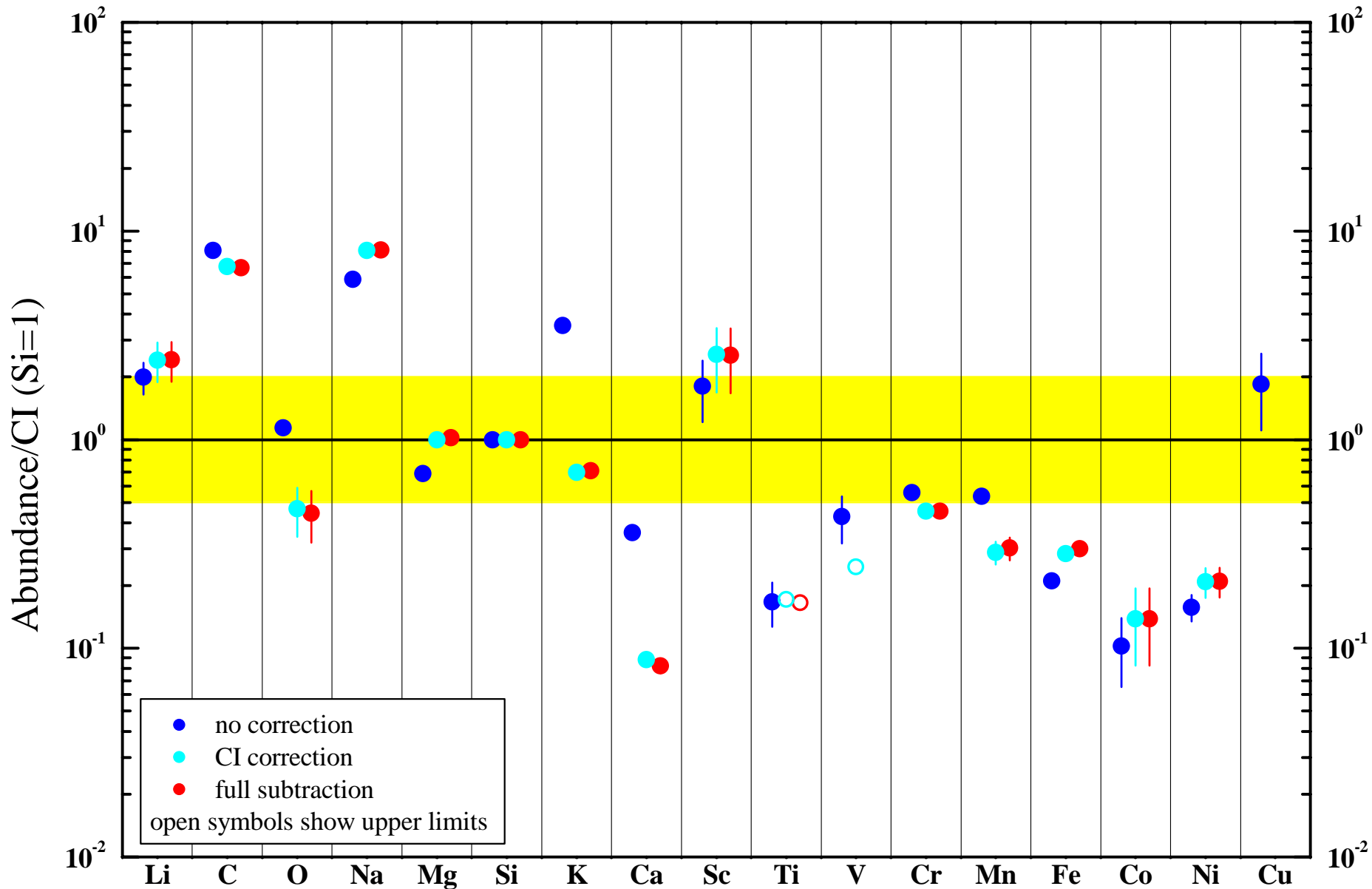
**Total Si**

100 scans  
245x245 pixels  
64 shots/(pixelxscan)



98x98  $\mu\text{m}^2$

# Bulk chemistry of crater rim



# Bulk chemistry of crater rim

C2091N,1

	no correction		Cl correction		full subtraction	
	Abd./Si	Error	Abd./Si	Error	Abd./Si	Error
Li	0.00011	0.00002	0.00014	0.00003	0.00014	0.00003
C	6.1	0.2	5.1	0.3	5.1	0.3
O	8.7	0.6	3.6	0.9	3.4	0.9
Na	0.337	0.001	0.463	0.001	0.466	0.005
Mg	0.722	0.002	1.051	0.003	1.08	0.01
Si	1.00	0.01	1.00	0.01	1.00	0.02
K	0.0131	0.0001	0.0026	0.0002	0.0026	0.0002
Ca	0.0218	0.0003	0.0054	0.0004	0.0050	0.0004
Sc	0.00006	0.00002	0.00009	0.00003	0.00009	0.00003
Ti	0.0004	0.0001	<0.0004		<0.0004	
V	0.00012	0.00003	<0.0001			
Cr	0.0075	0.0003	0.0061	0.0004	0.0061	0.0004
Mn	0.0050	0.0002	0.0027	0.0003	0.0028	0.0004
Fe	0.18	0.01	0.24	0.02	0.26	0.02
Co	0.0002	0.0001	0.0003	0.0001	0.0003	0.0001
Ni	0.008	0.001	0.010	0.002	0.010	0.002
Cu	0.0010	0.0004				