Foil C2118N1 Large Crater Preliminary Examination

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Large Crater X-Ray Mapping

JEOL 840A Scanning Electron Microscope
Measurement Conditions: 10 kV, 1nA, 900x magnification
512 x 512 maps of Al, Ca, Cr, Fe, K, Mg, Na, Ni, S, Si, Ti

Crater Locations

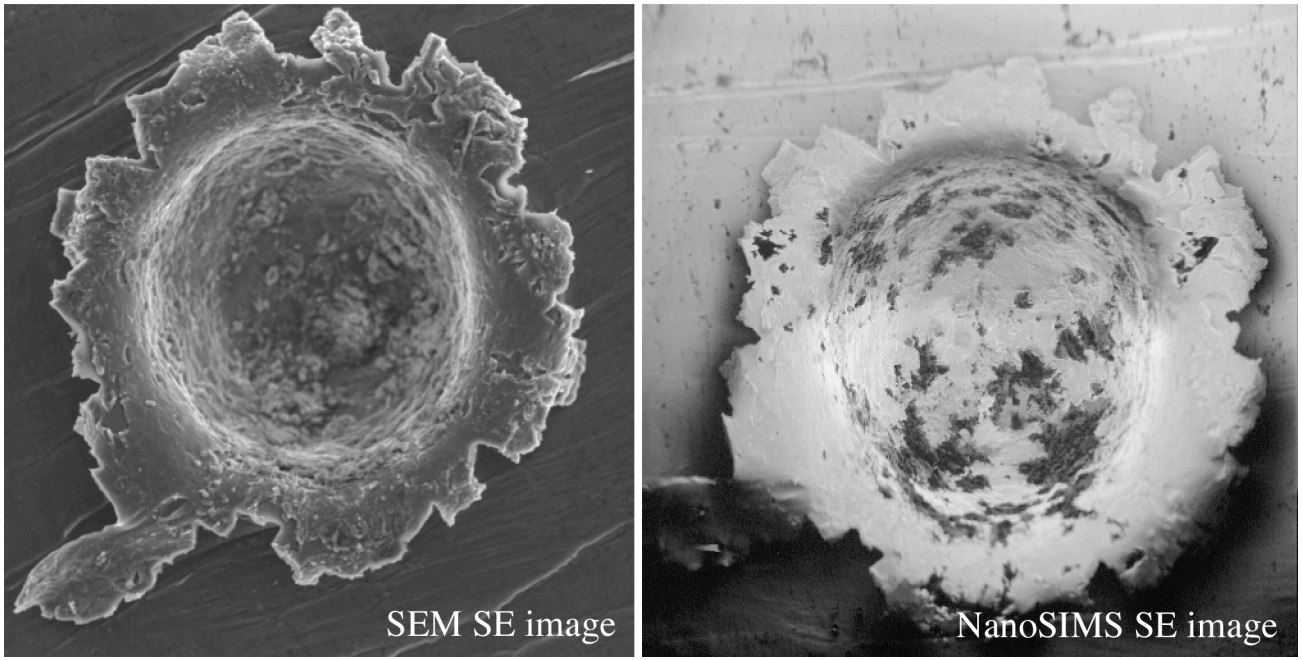
n/a

Crater Size Distribution

n/a

Photos

Large Crater in C2118N1 (diameter = 72 μm)



Crater Compositional Information

This crater contains abundant debris along the rim that appears to contain primarily Si, along with lesser amounts of Na, Mg, K and Ca. Some Fe- and S-bearing particles are also present.

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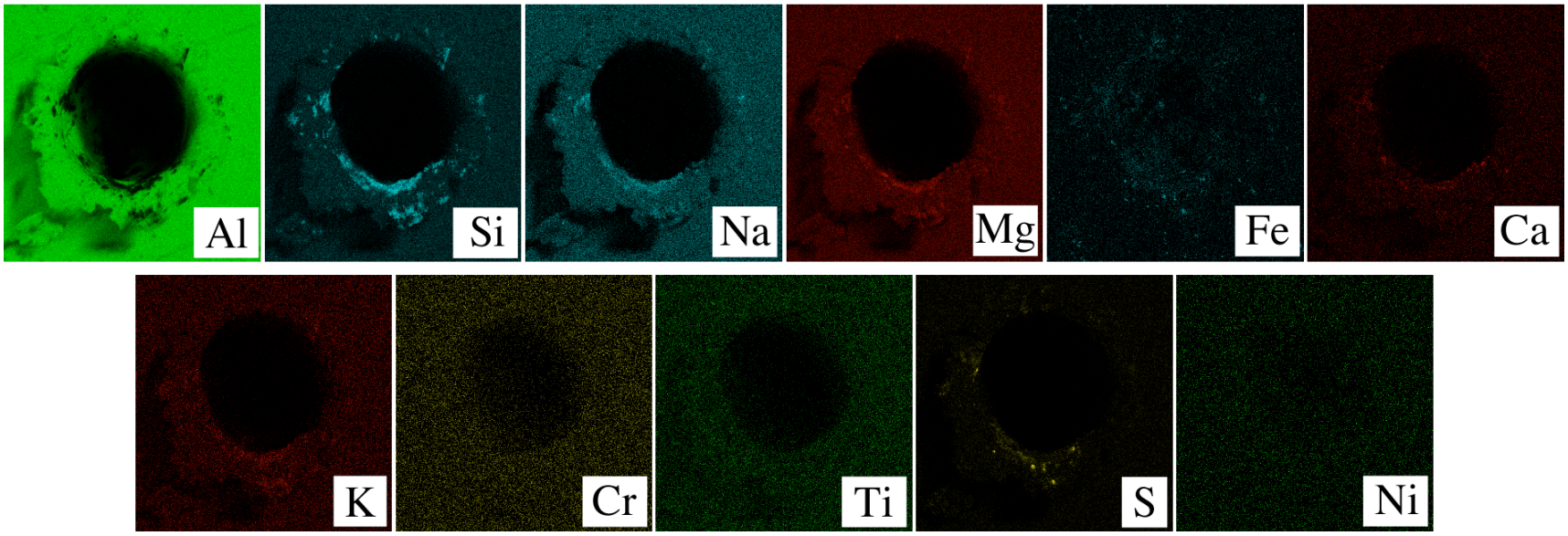

Additional Information

C and N isotopic imaging revealed the presence of a particle whose N isotopic composition is enriched in ^{14}N. The particle (outlined in the images below) has a $^{12}C/^{13}C$ ratio of 84 ± 5 (terrestrial = 89) and a $^{14}N/^{15}N$ ratio of 564 ± 97 (terrestrial = 272). The particle sputtered away during a second measurement carried out to verify the anomaly.