

Cell I1004

Track I3

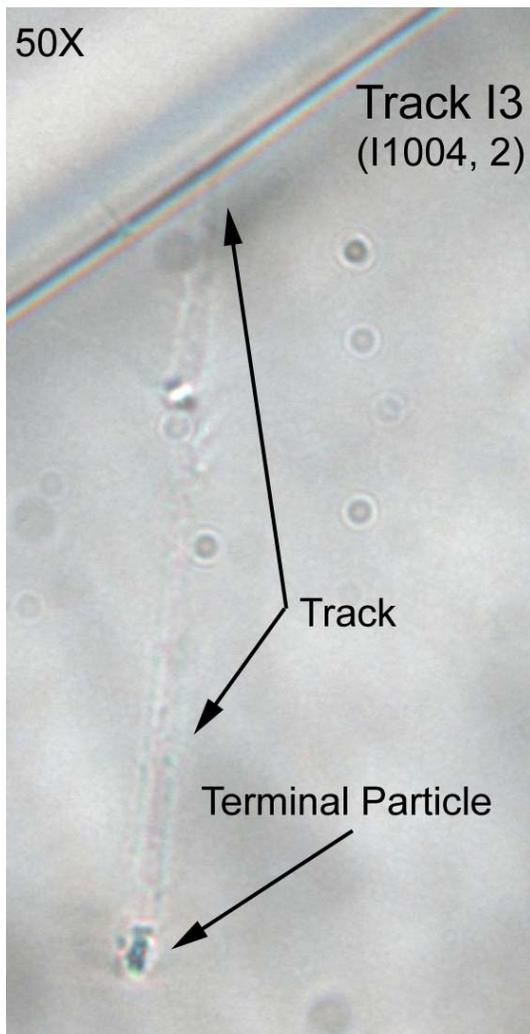
Images

Level 2 – [I1004.jpg](#)
[I1004A.jpg](#) (Post Keystone)

Track and Grains: N/A

Level 3: N/A

Microtomed samples: N/A



Track History: Cell I1004 has been scanned via the Stardust@Home Project and selected as a candidate tile containing a track. Track I3 was the second track removed from the Interstellar Tray and is classified as a high-angle track, meaning it may be “secondary” in nature (*i.e.*, the projectile forming this track may have been ejecta from a particle impact somewhere on the spacecraft).

Discovery by Vance Thompson/named "Spero"
Extracted 14feb08. Keystone thickness is 350 μm .
Sent to Brenker/ESRF, not analyzed
Sent to Flynn/NSLS for FTIR, not analyzed
Sent to Westphal/UCB
Mounted between polypropylene, sent to Simionovici/ESRF 15apr08
Analyzed at ESRF on microprobe
Sent back to UCB
Remounted between Si₃N₄ windows, analyzed by STXM on 11.0.2
Zenith = 40 degrees

Track Characteristics:

Type: Type A Carrot
Length / Depth: ?
Grain diameters: ?

Allocation History

Results

Track: Third off-normal track keystone. Aerogel density is 26 mg/cm³ measured by ALS STXM (assuming thickness is 350 μm).

ALS STXM: Terminal particle contains magnesium, cerium and a weak Al signal. No sodium or nickel detected; the particle was too dense (thick) for iron XANES. The upstream

fragment does not contain cerium, magnesium, iron, nickel, aluminum or silicon above background aerogel. It could be carbonaceous, but this keystone is too thick for carbon XANES.

Data Files: