

# Cometary Cell C2078

## Images

**Aerogel Cell:** [C2078-01.jpg](#)  
[C2078\\_T1\\_20x.jpg](#)

**Cell History:** Cell C2078 was removed from the cometary grid on September 14, 2006

**Track Information:** The tile has several small- to medium-sized tracks.

## Feature Images

## Allocation History

## Results

### Log Entries

**Note:** All track / features (e.g., T1) numbers assigned during the Level 3 scanning are to be considered “**Temporary**” and in do not relate to the “Official” track number that is assigned when a given features is extracted (e.g., Keystoned) from a tile. Abbreviations: EH – Entrance Hole, TP – Terminal Particle, MTW – Maximum Track / Bulb Width, TL – Track Length.

#### October 20, 2006

THSee

Mounted C2078 in the Level 3 fixture. Setup system for Depth Profiles and began the seven Depth Profiles of this tile.

Completed Depth Profiles at 14:24.

I plan to first look or image the larger tracks with the tile not tilted so that I can get more accurate data on the larger tracks. I will also image these same tracks again when doing the 15 degrees from below the tile surface scans for smaller tracks.

#### Tracks

C078-T1 – Normal to track, X=10.58, Y(Z)=1.82, Track is ~ 325  $\mu\text{m}$  in length with a terminal particle on the order of 5  $\mu\text{m}$  in size.

C078-T2 – Normal to the track, X=11.9, Y(Z)=19.01. Too deep in the aerogel to image from this angle.

C078-T3 – Normal to the track, X=16.9 mm and Y(Z)=13.7. Again too deep to get a good image from this angle.

C078-T4 – Largest track in the tile. Carrot shaped track with Max width of 215  $\mu\text{m}$ . Located at X=23.4 and Y(Z)=6.68. Track measured 4,455  $\mu\text{m}$  in length. Dark colored terminal particle that measures 13.5 x 10  $\mu\text{m}$  in size.

C078-T5 – X=30.98, Y(Z)=19.24. Fairly large track located near the back surface of the tile. Appears to measure 1,080  $\mu\text{m}$  in length, but I may not be able to pick the actual terminus due to having to view item through 19 mm of aerogel. Too much aerogel in path to image TP at this angle.

Complete track scan with tile normal to scope.

Tilted tile 15 degrees and began track scan in this configuration at 15:10.

Senator Culberson arrived at 15:15, so the scan was stopped for show & tell.

**October 24, 2006**

**J. Warren**

Setting up C2078 to do tracks and Top mosaic @ 7X & 20X.

C2078-T1 –  $X = 10.73$  and  $Y(Z) = 1.77$ . Track measures ~ 323  $\mu\text{m}$  in length with a MTW of ~ 19  $\mu\text{m}$ . TP hidden behind surface feature on the front of the tile that obscured the TP area. As a result, the track may be longer than measure in this photo.

C2078-T2 - Do find track #2 1<sup>st</sup> photo 078-T2 is a bottom shot. Track is 616 microns long.  $X+ 12.3$  mm and  $Y= 19.08$  mm. Track is a carrot style and is on the back edge of the cell. TP broke up into fines and a photo could not get it.  $EH = 55 \mu\text{m}$

C2078-T3 - has a bulb and a TP. Length is 671 microns and bulb width Tp look to be 11 microns.  $X= 17.6$  mm and  $Y= 13.6$ .  $EH = 55$  microns.

C2078-T4 - is a very long track.  $X= 23.8$ mm and  $Y= 6.87$  mm. Carrot style. Track is 3.28 mm long. TP is ~ 20 microns.  $EH= 150$  microns

C2078-T5 - is another carrot style with a cork screw effect. Track length is 1.3mm. Track is at the back of the cell, so can not get a photo of the TP or  $EH$  is ~ 57 microns.  $X= 31.7$ mm and  $Y= 19.1$  mm

C2078-T6 - is a small track and  $X= 25.9$ mm and  $Y= 19.2$ mm, very back edge.  $EH=57$  microns. Track length is 198 microns.

Imaged 7x & 20x Top-View Mosaics.

Completed around 15:10. Returned tile to storage cabinet.