

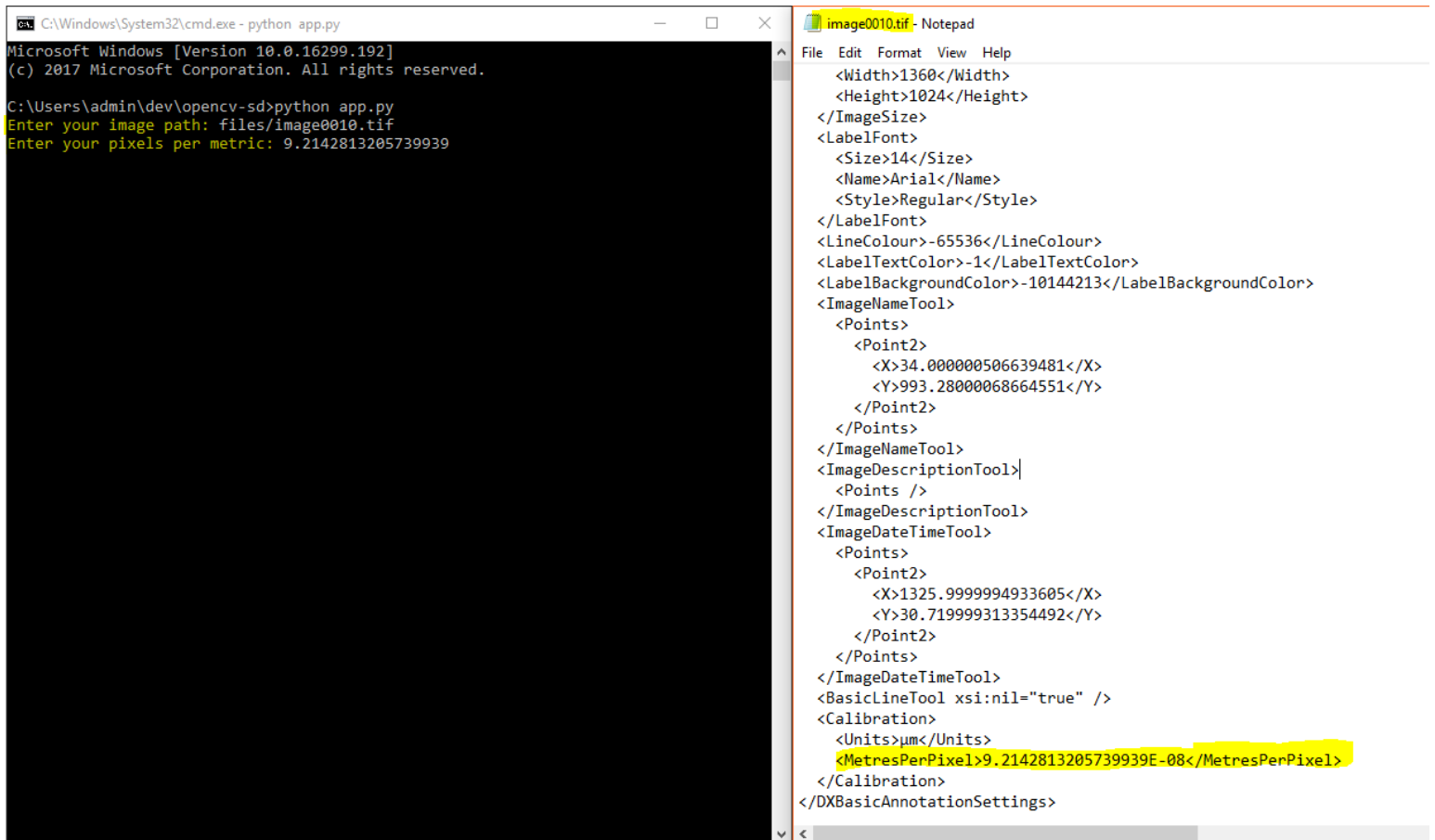
Crop & Measure

From the application directory run python app.py.

```
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\admin\dev\opencv-sd>python app.py
```

Next you will receive an input prompt requesting the path to the image file you want to analyze and the pixels per metric value. In the image below the pixels per metric value was derived from the image EAX file.



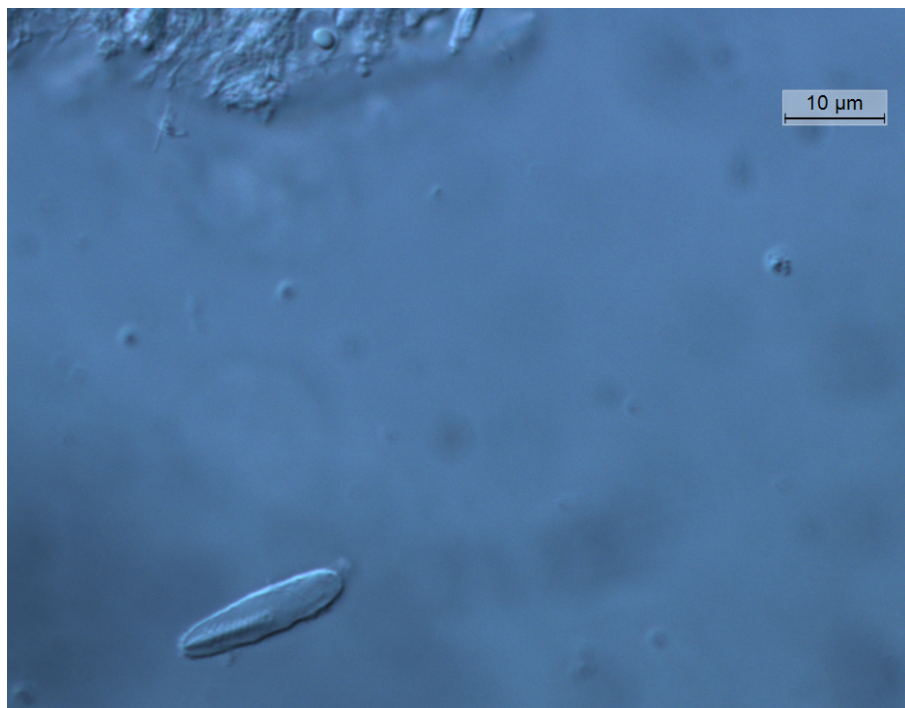
The screenshot shows a Windows command prompt window titled "C:\Windows\System32\cmd.exe - python app.py" and a Notepad window titled "image0010.tif - Notepad". The command prompt displays the output of running the Python script, which prompts for an image path and a pixels per metric value. The Notepad window displays the XML output of the script, which includes the image size, label font, line color, label text color, label background color, image name tool, points, image description tool, image date time tool, calibration, and DXBasicAnnotationSettings.

```
C:\Windows\System32\cmd.exe - python app.py
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

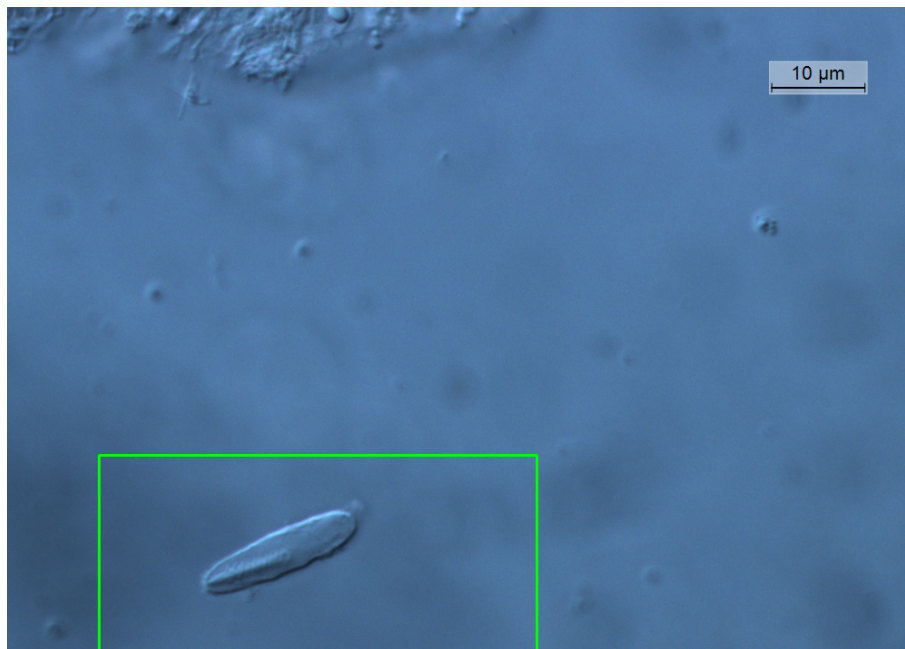
C:\Users\admin\dev\opencv-sd>python app.py
Enter your image path: files/image0010.tif
Enter your pixels per metric: 9.2142813205739939
```

```
<Width>1360</Width>
<Height>1024</Height>
</ImageSize>
<LabelFont>
  <Size>14</Size>
  <Name>Arial</Name>
  <Style>Regular</Style>
</LabelFont>
<LineColour>-65536</LineColour>
<LabelTextColour>-1</LabelTextColour>
<LabelBackgroundColor>-10144213</LabelBackgroundColor>
<ImageNameTool>
  <Points>
    <Point2>
      <X>34.000000506639481</X>
      <Y>993.28000068664551</Y>
    </Point2>
  </Points>
</ImageNameTool>
<ImageDescriptionTool>
  <Points />
</ImageDescriptionTool>
<ImageDateTimeTool>
  <Points>
    <Point2>
      <X>1325.9999994933605</X>
      <Y>30.719999313354492</Y>
    </Point2>
  </Points>
</ImageDateTimeTool>
<BasicLineTool xsi:nil="true" />
<Calibration>
  <Units>µm</Units>
  <MetresPerPixel>9.2142813205739939E-08</MetresPerPixel>
</Calibration>
</DXBasicAnnotationSettings>
```

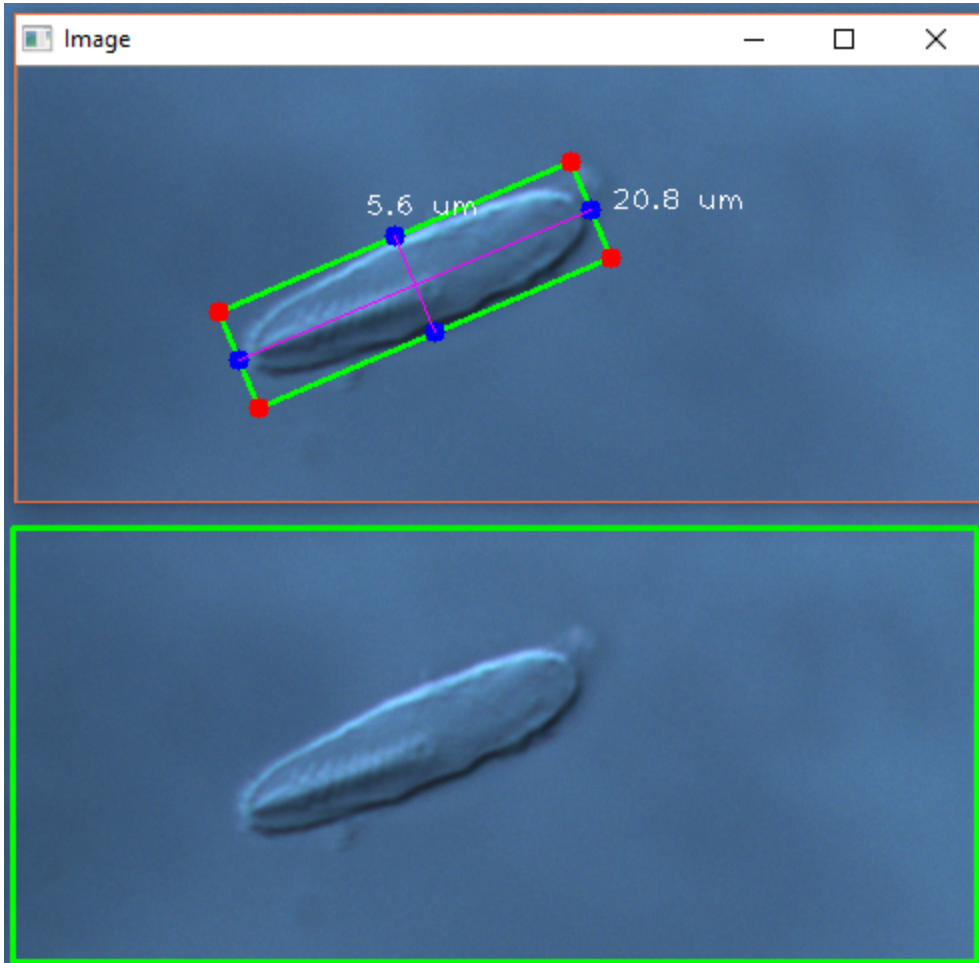
After submitting the input values the image file specified by the path provided will open:



From the top left position of the object you wish to crop, click and drag the outline around the image and release the mouse button. Then press the “c” key to initiate the crop.



The application will then open a new image derived from the crop area with the length and width measurements in micrometers.



```
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\admin\dev\opencv-sd>python app.py
Enter your image path: files/image0010.tif
Enter your pixels per metric: 9.2142813205739939
5.6434135437
20.7627563741
```