Manual of Nematode Segmentation Tools

**1. Start of the program**

double click “main.exe”, it may last a few seconds for file decompression

**2. Tools**

At the top of the main interface, several tools are available. Click the buttons or use shortcuts to get corresponding tool activated.

**2.1. “Open” and “Save” buttons**

“Open” button will start a dialog, through which you can find and open the image to be annotated.

By clicking “Save”, added annotations will be saved into a “.hdf5” file with the same name under the same directory as the currently opened image.

Similarly, when opening an image, the image directory will be searched. If a .hdf5 file with the same name is founded, the annotations will be loaded.

**2.2 “Zoom in” and “Zoom out” button**

Shortcuts: **Ctrl + A for zoom in**; **Ctrl + S for zoom out**

**2.3. “Browse” button**

Enter “Browser” mode. In this mode, you can draw nothing but browse all existing annotations

**2.4. “Poly” button**

In this mode, polygons of any shape can be draw:

* Single left click to start the polygon drawing from the current mouse position
* Move the mouse along the boundary of the polygon you want to draw
* Single/double left click to finish

**2.5. “Ellipse” button**

In this mode, ellipses annotations can be created:

* Single click to give an end point of the main axis of the ellipse
* Move the mouse to the other end point of the main axis
* Press **A/S key** to enlarge/shrink the side axis
* Single click to finish

**2.6. “Dot” button**

In this mode, you can make dot annotations by just clicking.

**2.7. “BBX” button**

In this mode, bounding boxes can be created:

* Single click to give a corner of the box
* Move the mouse to the diagonal corner of the box
* Single click to finish

(the drawing can be cancelled by pressing **ESC\_Key** before the drawing is finished)

**3. Other operations**

**3.1 slide the window**

Use scrollbar or **mouse wheel**

**3.2. select**

At any mode and any moment except during the drawing, double click will select an annotation

**3.3. delete**

Click “Delete” button in the tool bar or press **Delete\_Key** will delete the annotation

**3.4. give labels**

With an annotation selected, double click a label in the label list (at the righ side of the GUI)