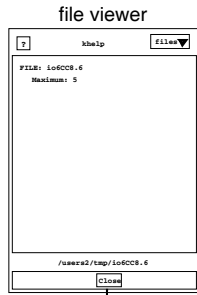


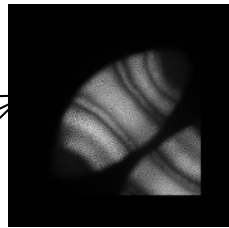
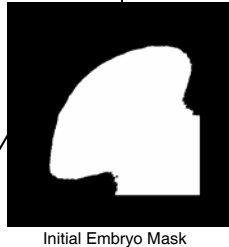
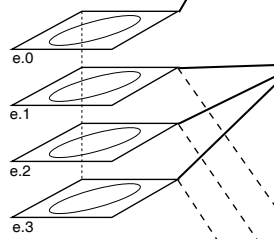
Cases 3 and 4:

A nearby embryo is pushed up against the desired embryo; an image region that serves as a separation buffer can be drawn with the Khoros Region-Of-Interest (ROI) extractor.

Label and Count Blobs
(Refer to the "Remask" wksp. for these steps)



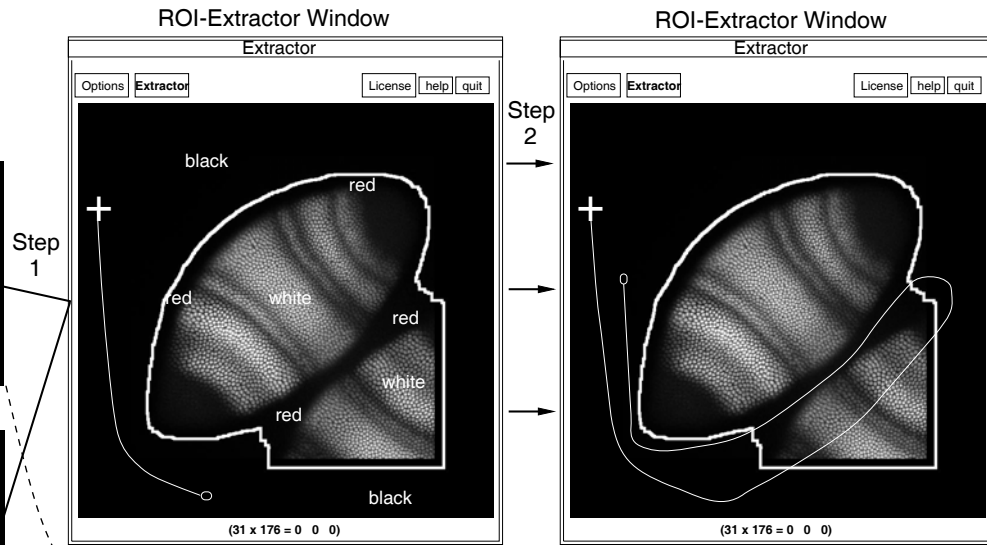
Input:
4-Element Embryo File



1. Whole Embryo Mask and Pixel Maximum are combined into a single image, with the mask in red and the max in white, which is displayed in the ROI window.
2. Move the cursor to the image position where the desired line drawing should begin. hold down the left mouse button and encompass the region to be excised from the mask, then release the button when the line has been drawn. ****All parts of the line must remain BELOW and to the RIGHT of the initial cursor position**.**

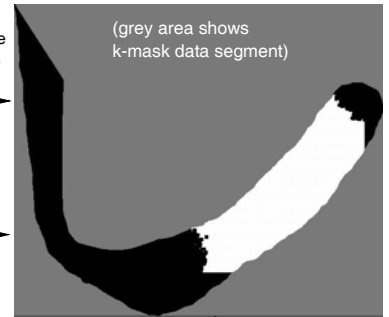
Note for Step 2:
record x,y co-ordinates that are frozen at the bottom of the ROI- window upon pushing the mouse button. These must be used as arguments for Step 4.

Extract and Display



Two Steps in Freehand Drawing the Region which needs to be Excised

Extracted Area Image File:
Image contains all pixels within area bounded by drawn line

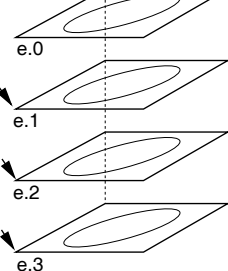


3. Remove Data Mask Segment that is created by the ROI
4. Inset extracted area image into a blank frame at appropriate position, thus creating a "plug" to remove from the initial embryo mask.
5. Subtract "plug" image from initial embryo mask image, yielding a corrected mask.

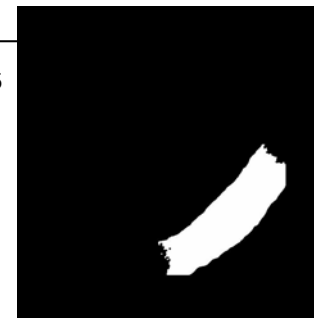
Step 3

Append three main image channels and new mask along elements axis and export.

Output:
Embryo File with new mask



Modified embryo mask



"Plug" to be subtracted



Extracted area, data mask removed

Step 5

Step 4