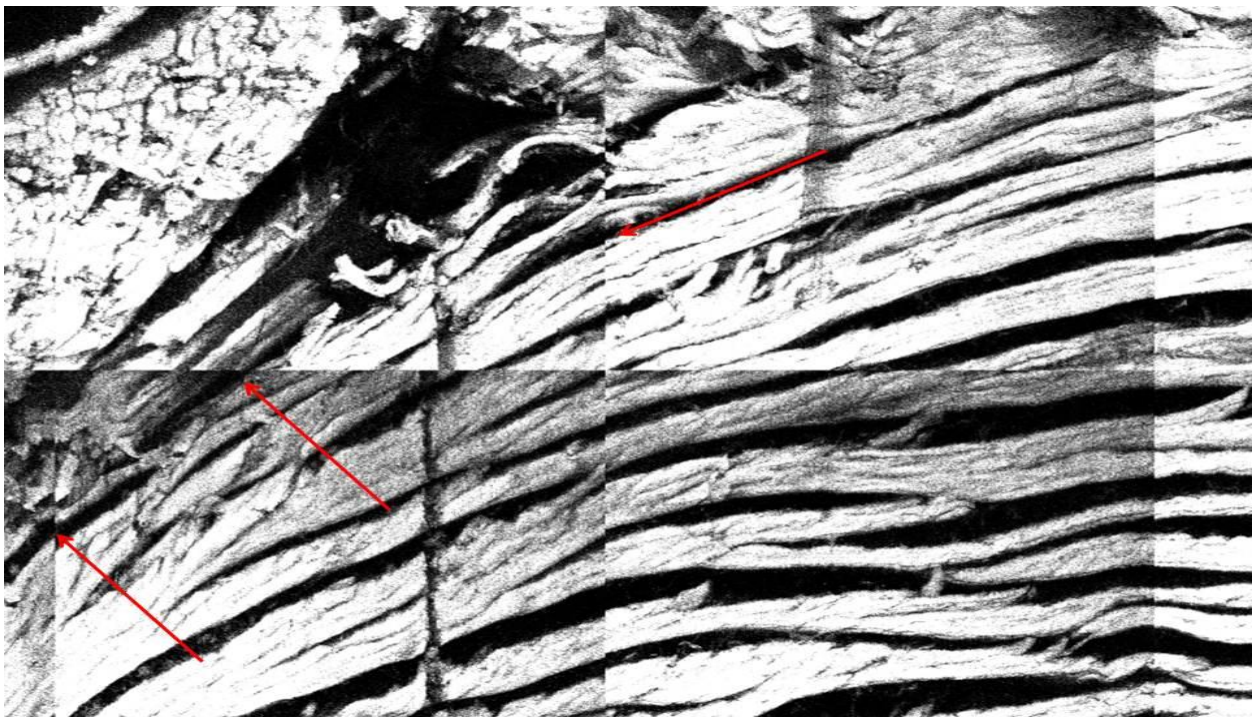# In-Plane Tile Registration

- Currently our stitching protocol just involves stitching of individual tiles based on the co-ordinates of the stage.
- However, because of the use of an inverter in the microscope setup, there is a slight misalignment during the stitching of inplane tiles.
- Upon close inspection this offset is somewhere in the range of 7-8 voxels. However, I believe that this may not be the case of simple rigid misalignment.
- So the question really is that, is there any robust, probably non-rigid inplane tile registration algorithm that you guys are aware of, or have implemented before.
- We guys here do have a rigid out of plane, Z cut step alignment algorithm, which is working fine.

The arrows indicate the inplane tile misalignment problem mentioned above. (This slice has not been corrected for inplane intensity.)

You could also see them in the dataset that we have provided to you guys, if you just zoomed in on any one slice with a well-defined structure.