

Help Menu for Neuroglancer

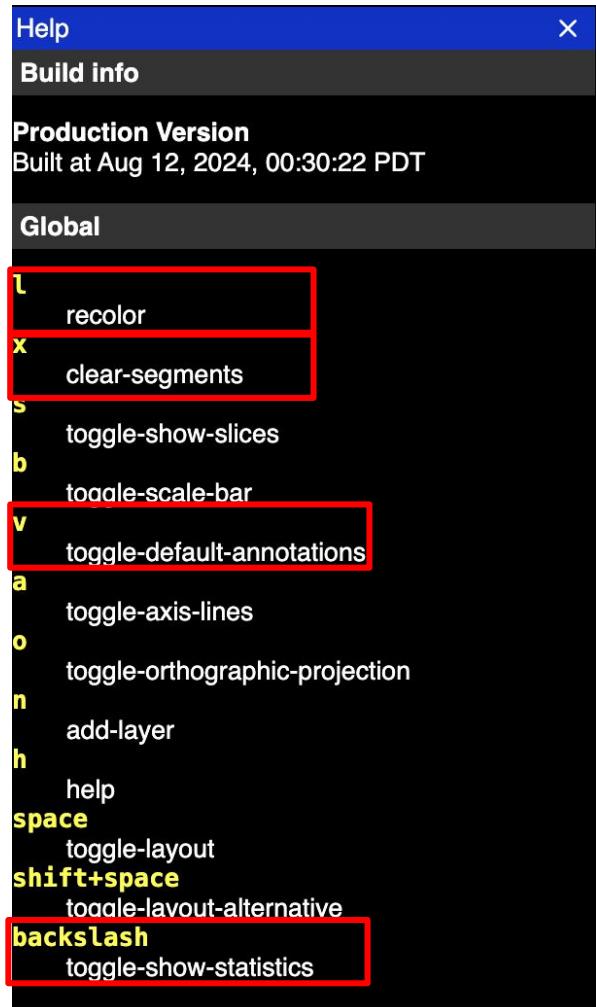
Litao Version built August 12, 2024

Global Menu

Unclear controls

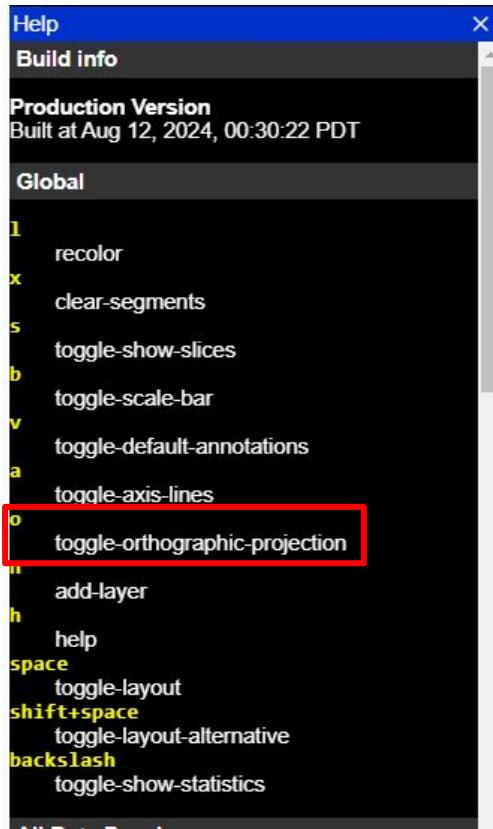
Not sure about what the following do:

- **I** → recolor
 - Drew polygons and tried this, nothing happened
 - Does this recolor an image layer or annotations?
- **X** → clear segments
 - Drew polygons and tried it, but nothing happened
 - What segments is this referring to?
- **v** → toggle default annotations
 - What is a default annotation?
- **backslash** → show statistics
 - what statistics?



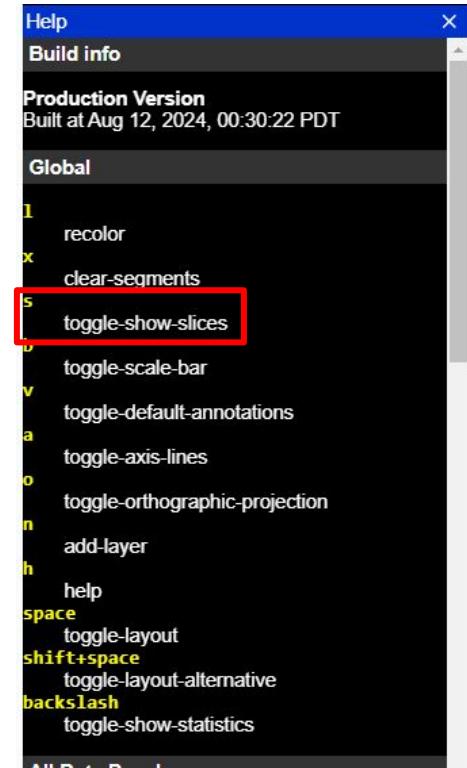
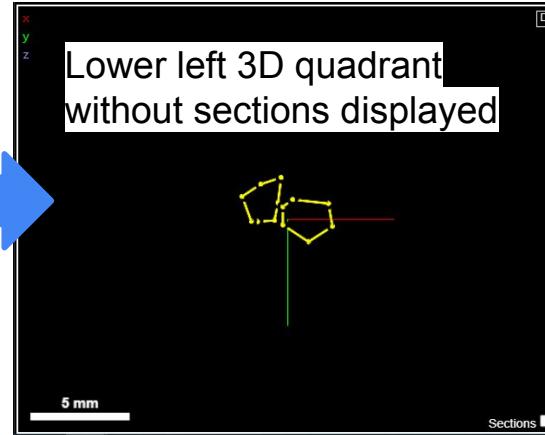
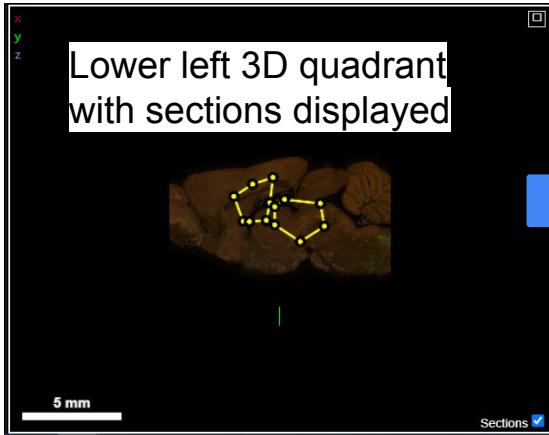
Unclear command

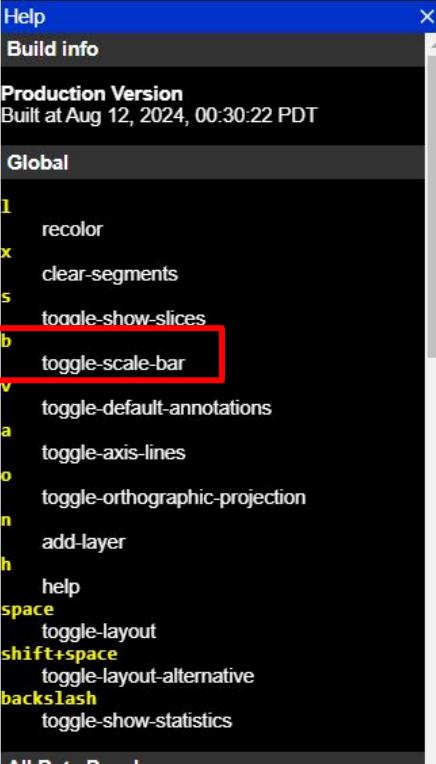
- o → toggle-orthographic-projection
 - Pressing “o” on keyboard seems to change the the orthographic projection by very little
 - What is this useful for?



Toggle slices in 3D-view quadrant (same for Mac/PC)

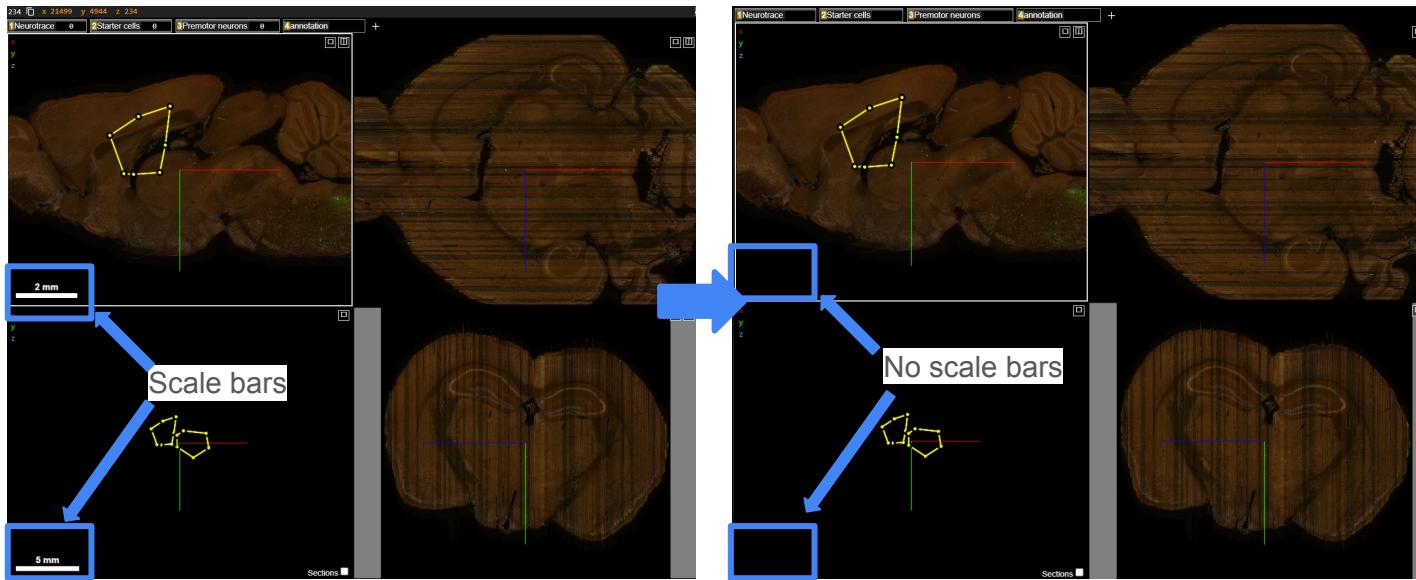
- s → toggle-show-slices
 - Pressing “s” on keyboard toggles slices in 3D quadrant on the lower left





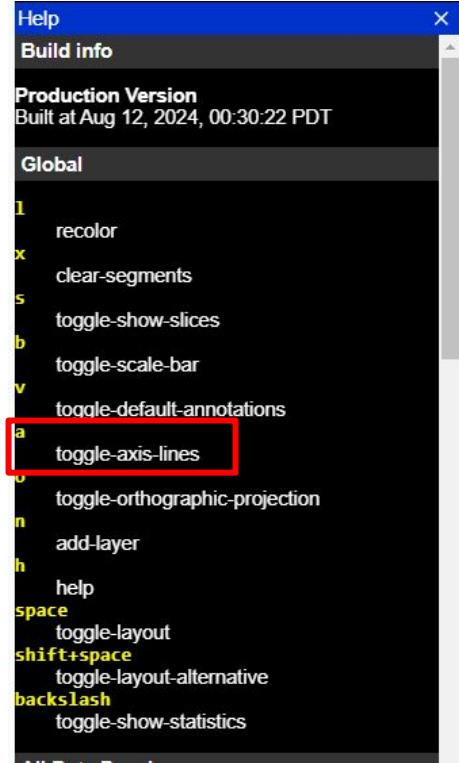
Toggle scale bars on/off (same for PC/Mac)

- b → toggle-scale-bar
 - Pressing “b” on keyboard toggles scale bar on both sagittal plane and 3D-viewer



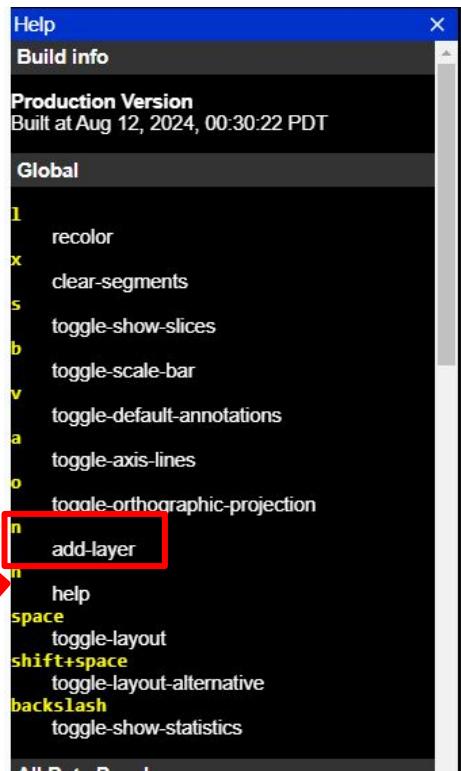
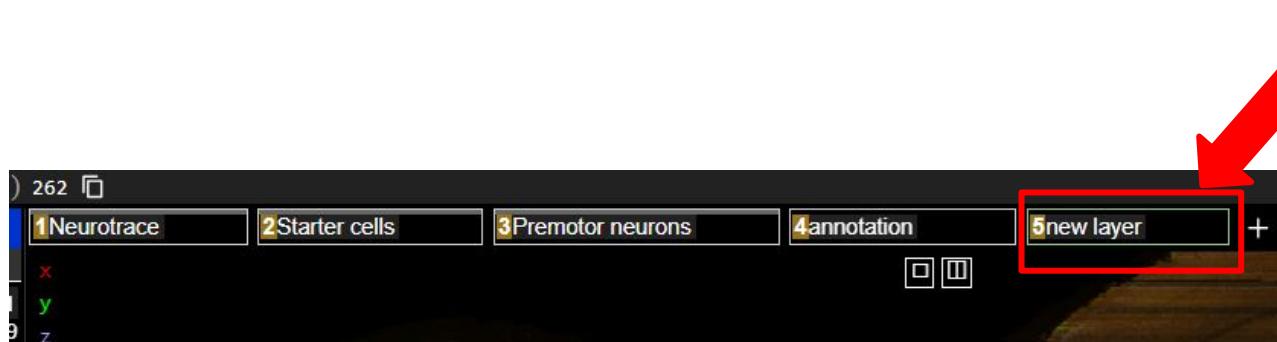
Toggle axis on/off (same for Mac/PC)

- a → toggle-axis-lines
 - Pressing “a” key on keyboard toggles x-y-z axis on and off for all views



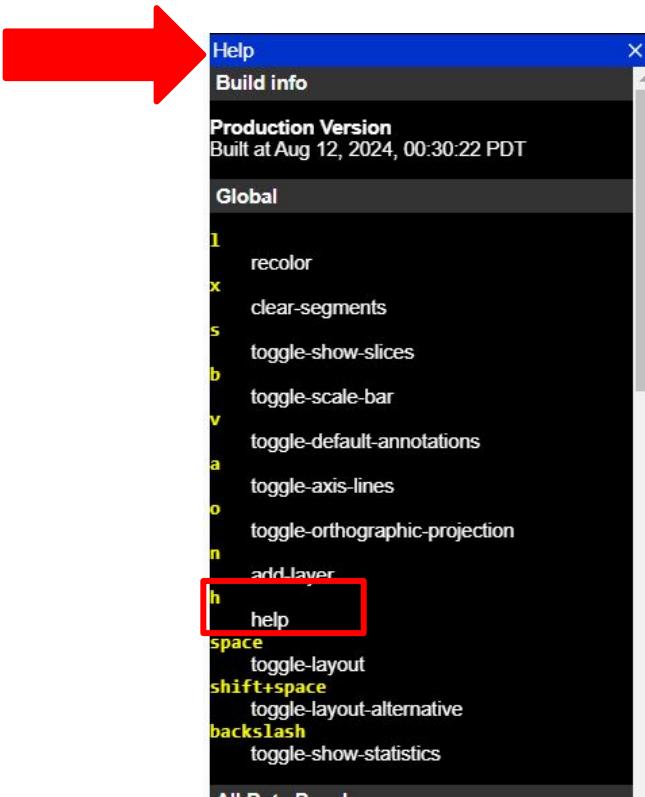
Create new image layer (same on Mac/PC)

- n → add-layer
 - Pressing “n” on keyboard creates a new **image layer**
 - Different from an annotation layer!
 - Should change description to specify that this is only creating a new image layer

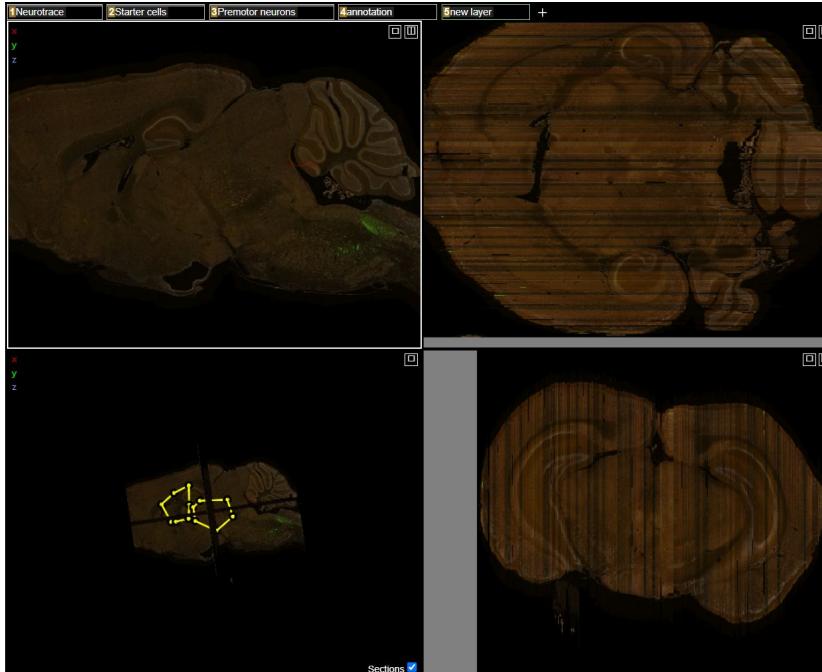
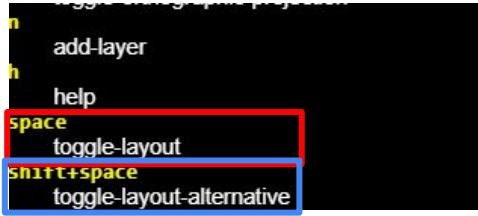


Launch the “Help” Menu (same on Mac/PC)

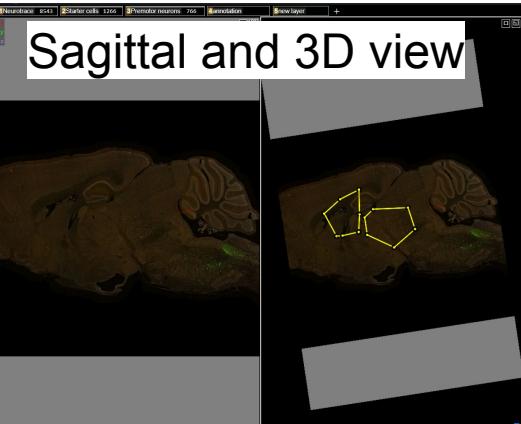
- h → help
 - Pressing “h” on keyboard opens up “Help” Menu on the right hand side of screen



Change NG layout view (same on Mac/PC)



Space bar only

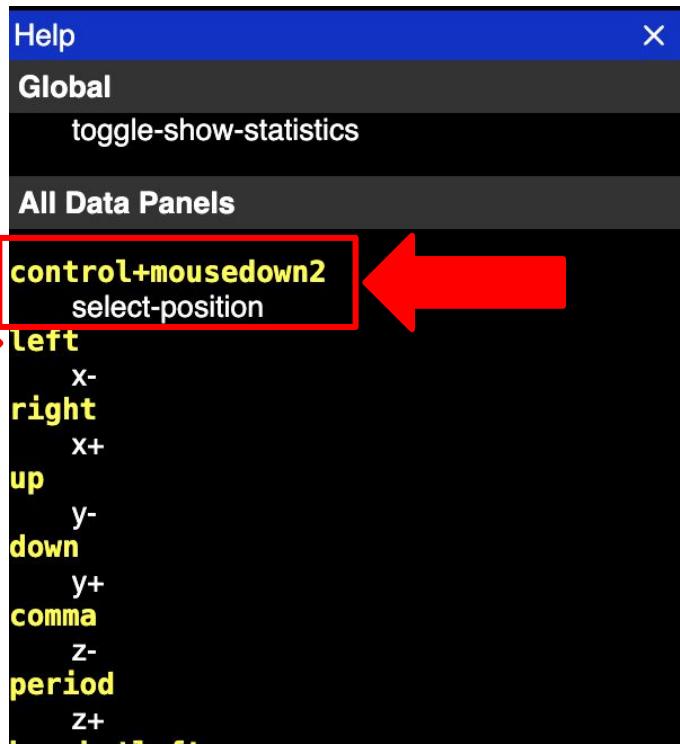
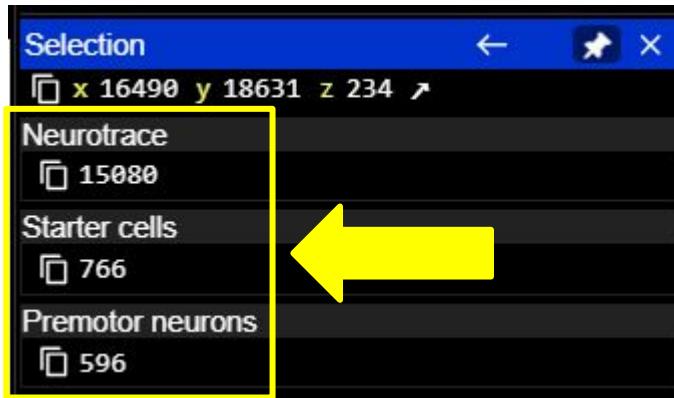


Shift + Space
bar

All Data Panels Menu

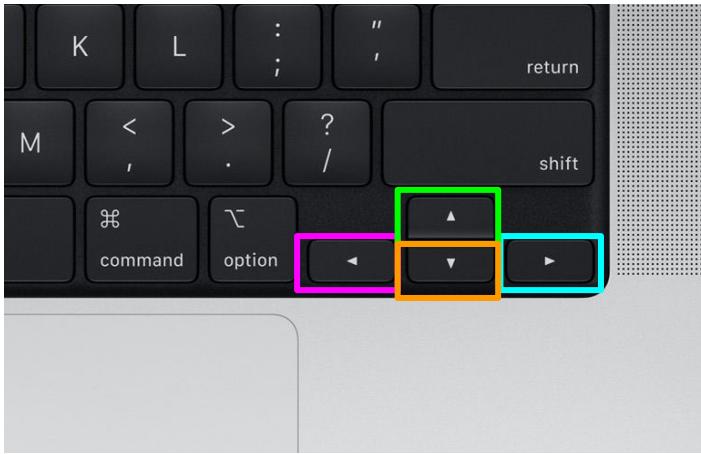
Unclear controls

- Tried ctrl + right-click on PC
- ctrl + two-finger click on Mac
- Unsure what it represents?
- Is this pixel value?

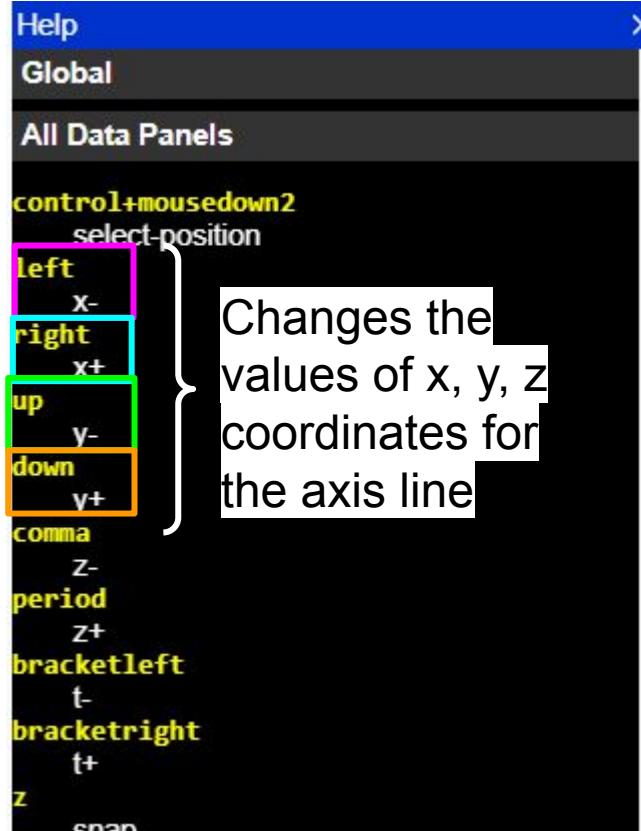
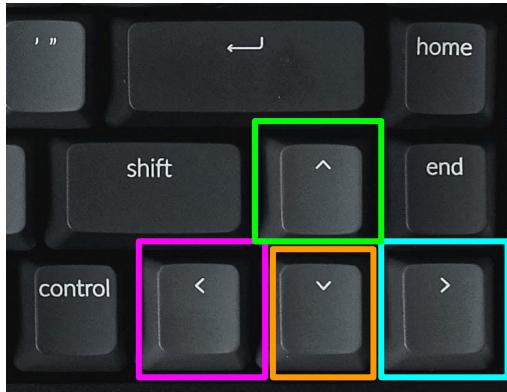


Move axis-line coordinates (same on Mac/PC)

Mac keyboard
arrows

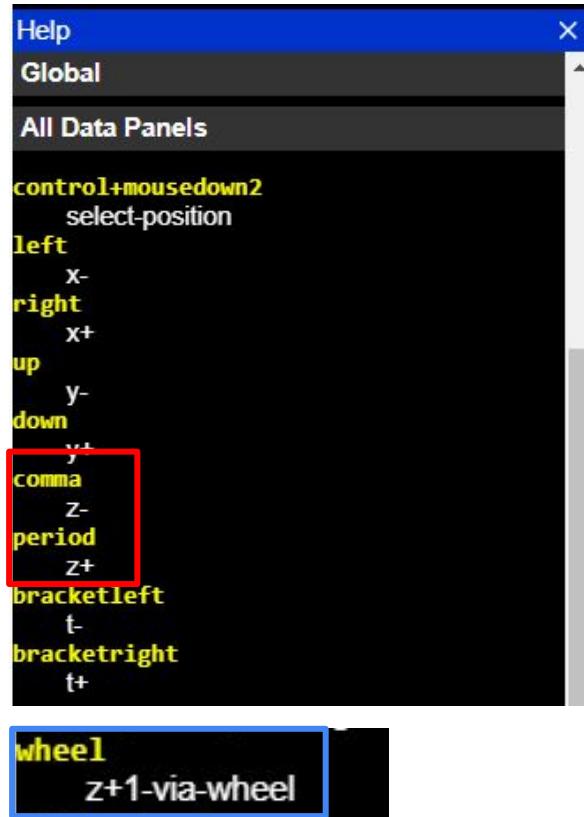


PC keyboard
arrows



Moving from section to section along z-axis (same for Mac/PC)

- comma → z- (previous section)
 - Pressing “comma” key on keyboard decreases z-value (previous slice)
- period → z+
 - Pressing “period” key on keyboard increases z-value (next slice)
- Can do the same with scroll wheel on mouse
 - Scroll up = z+1
 - Scroll down = z-1

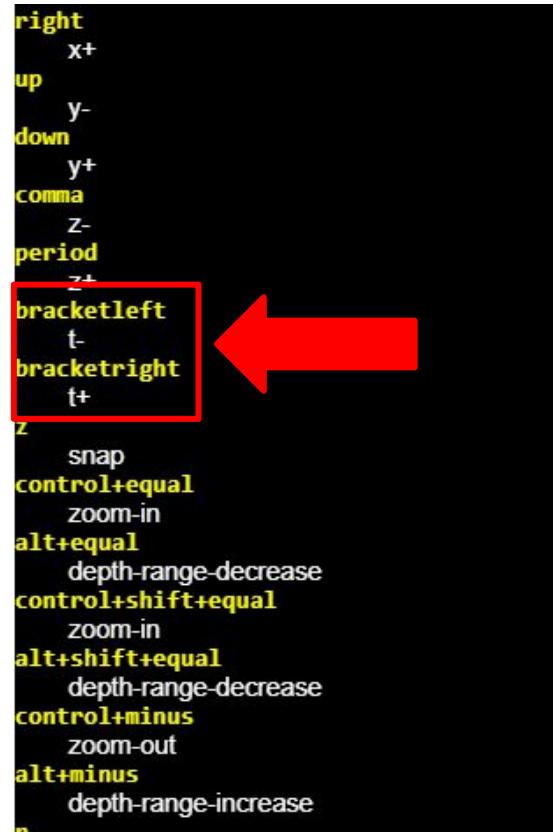


“bracket” commands unknown

The following controls did not change anything in both Mac/PC:

- bracketleft → t-
- bracketright → t+

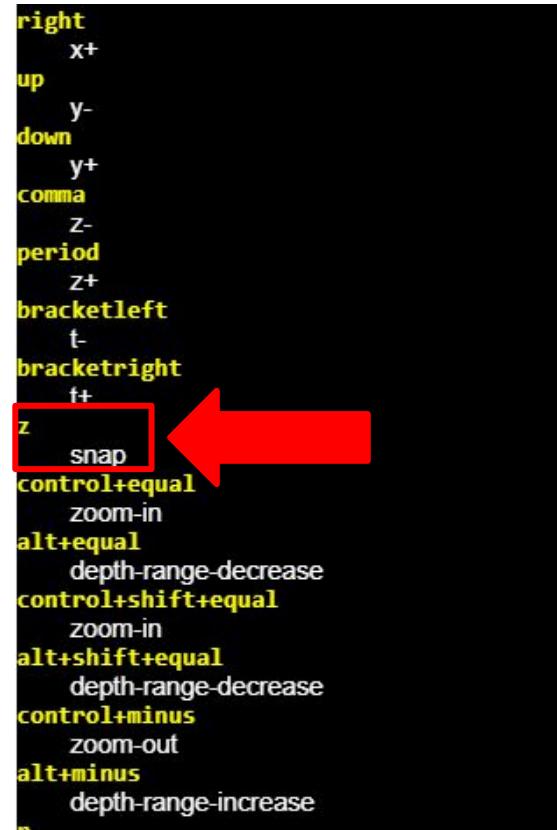
What does the “t” represent?



“snap” action unknown

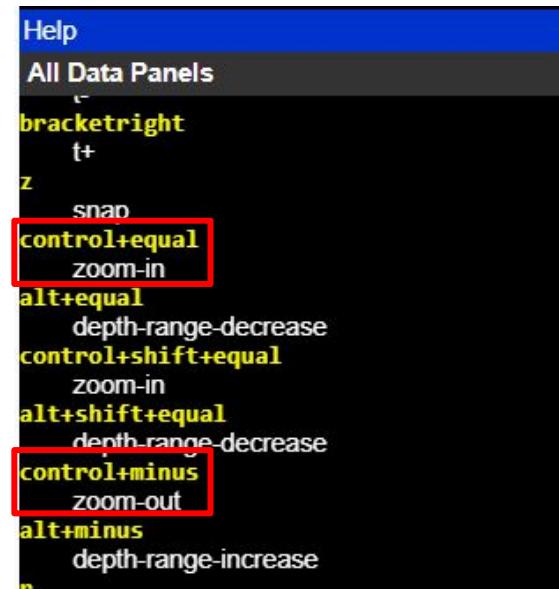
Pressed the “z” key and did not notice any changes with or without annotations displayed on both Mac/PC

What is this “snapping” to?



Zoom in/out of section (same for Mac/PC)

- control + equal → zoom-in
 - **On PC:** press “ctrl” key and then the “=” key on keyboard to zoom into section
 - **On Mac:** press “control” key and then the “=” key on keyboard to zoom into section
- control + minus → zoom-out
 - **On PC:** press “ctrl” key and then the “-” key on keyboard to zoom out of section
 - **On Mac:** press “control” key and then the “-” key on keyboard to zoom out of section



Change depth range on z-axis needs edit

Depth of range changes the visibility of annotations across sections:

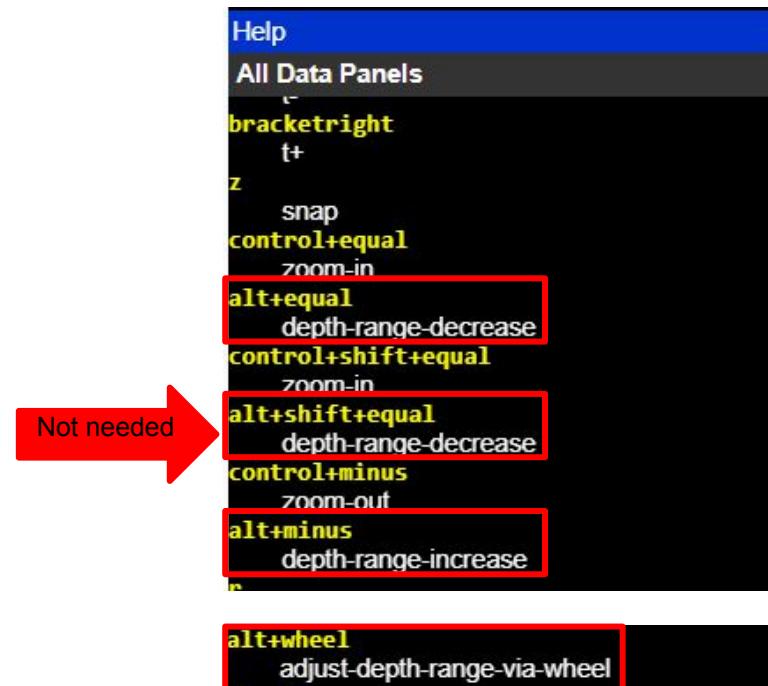
- more depth of range means the annotations of one section will appear more visibly on sections prior/after
- less depth of range will display annotations on the section they were made only

Mac command is different:

- *option + equal* → depth-range-decrease
- *option + minus* → depth-range-increase
- *option + scroll up* → depth-range-increase
- *option + scroll down* → depth-range-decrease

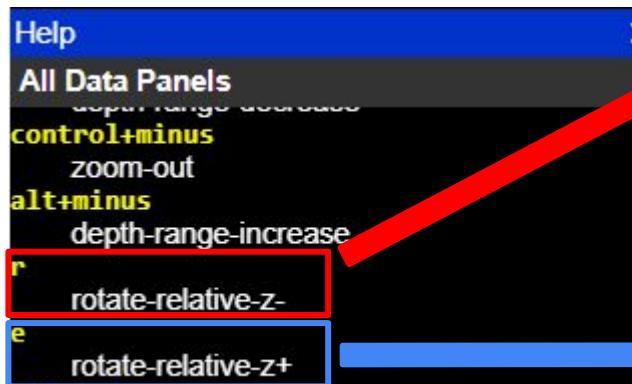
PC commands are the same:

- *alt + equal* → depth-range-decrease
- *alt + minus* → depth-range-increase
- *alt + scroll up* → depth-range-decrease
- *alt + scroll down* → depth-range-increase

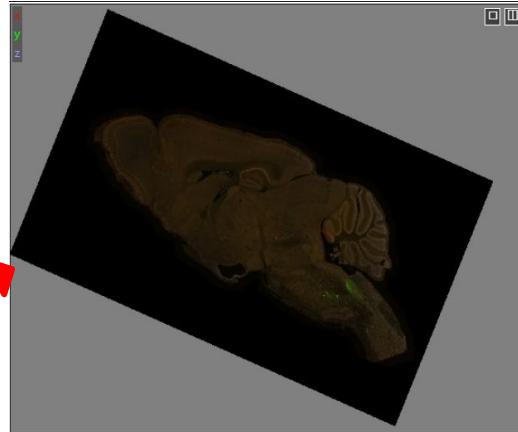


Rotate slice image (same on Mac/PC)

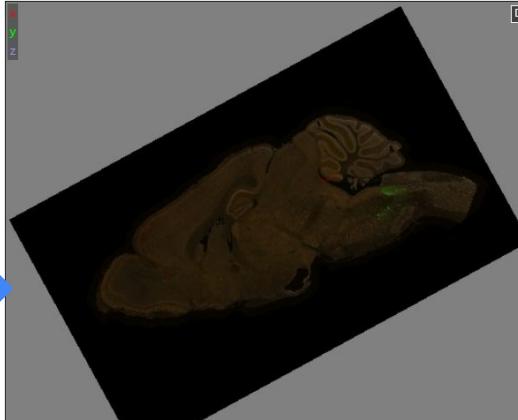
- **r** → `rotate-relative-z-`
 - Rotates image clockwise
- **e** → `rotate-relative-z+`
 - Rotates image counter-clockwise



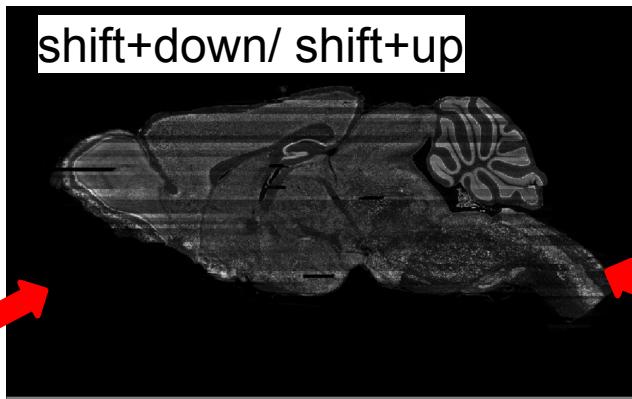
Clockwise rotation



Counter-clockwise rotation



Command unclear using key arrows on both Mac/PC



shift+down
rotate-relative-x-
shift+up
rotate-relative-x+
shift+left
rotate-relative-y-
shift+right
rotate-relative-y+

Polygon Annotation Tools

Should be grouped together under the same section

Rewrite command for creating annotation

Change the following:

1. Old: *control + mousedown0* → annotate

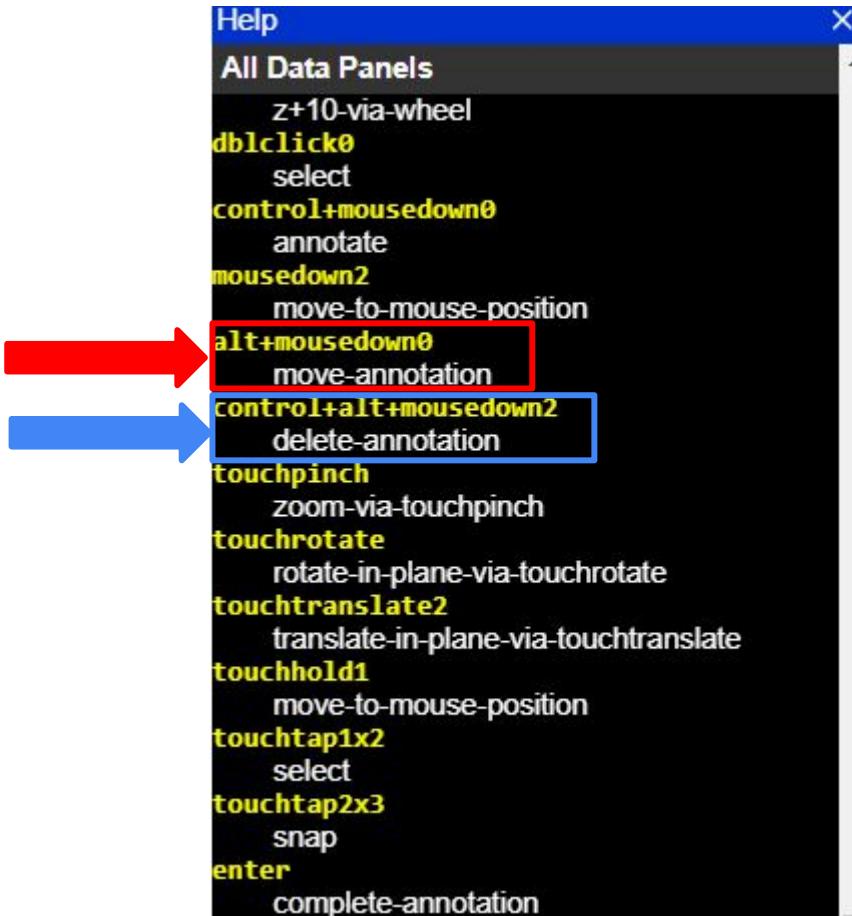
PC New: *control + left-click* → create annotation vertex

Mac New: *control + one-finger click* → create annotation vertex

2. Old: *mousedown2* → move-to-mouse-position

PC New: *right-click* → move-to-mouse-position

Mac New: *two-finger click* → move-to-mouse-position



Suggested edits for moving annotations commands

Change the following:

3. Old: *alt + mousedown0* → move-annotation

PC New: *ctrl + left-click* → create annotation vertex

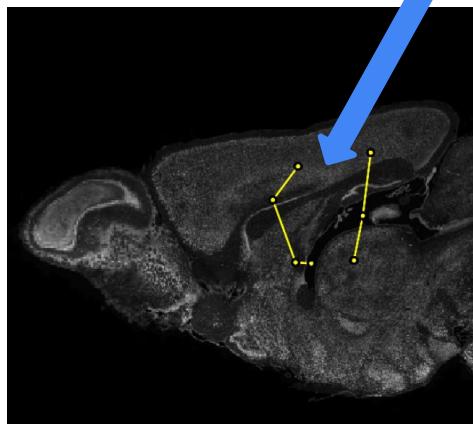
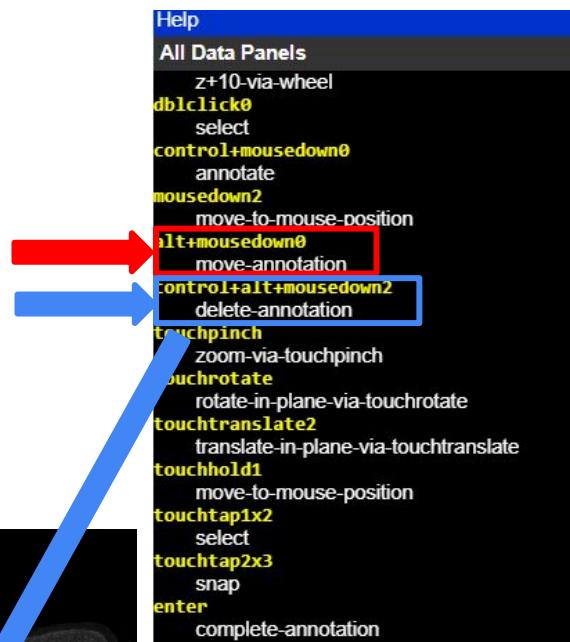
Mac New: *command + one-finger click* → create annotation vertex

4. Old: *control + alt + mousedown2* → delete-annotation

- This does NOT delete a vertex, instead it deletes the line segment between vertices
- This was not previously used for annotating

PC New: *alt + ctrl + right-click* → delete line segment annotation

Mac New: *control + option + two-finger click* → delete line segment annotation



Moving Vertices

PC New: *alt + left-click and drag*→ move single annotation vertex

Mac New: *option + one-finger click and drag*→ move single annotation vertex

Important: vertex size should be large enough to place pointer in the middle of the vertex



Shifting Polygons

Include commands for:

The following commands work if user selects any part of the polygon:

PC: *Alt + Shift + left-click* → translate polygon

Mac: *Option + Shift + one-finger-click*
→ translate polygon



Add/ delete vertex points on polygons

- escape → undo-annotation
 - Hitting “esc” key should undo annotation, but could not get this to work on Mac/PC

Change the command wording:

- shift+dblclick0 → add-vertex-polygon

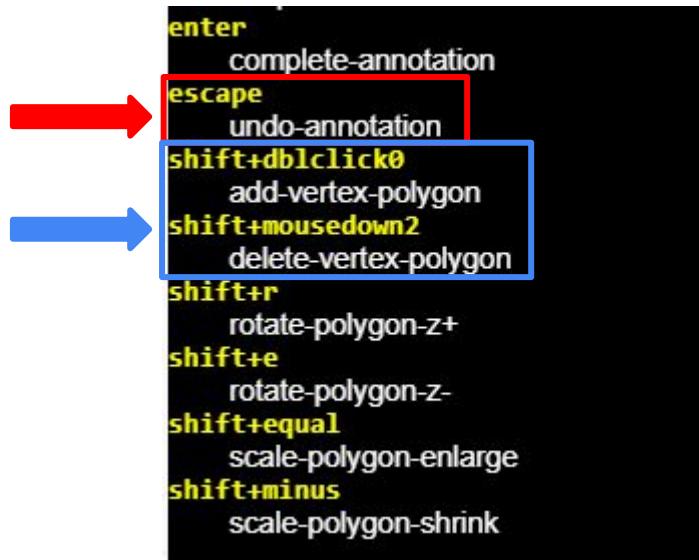
PC : Change to *shift + double-left click*

Mac: Change to *shift + one-finger double-click*

- shift + mousedown2 → delete-vertex-polygon

PC : Change to *shift + right-click*

Mac: Change to *shift + two-finger click*

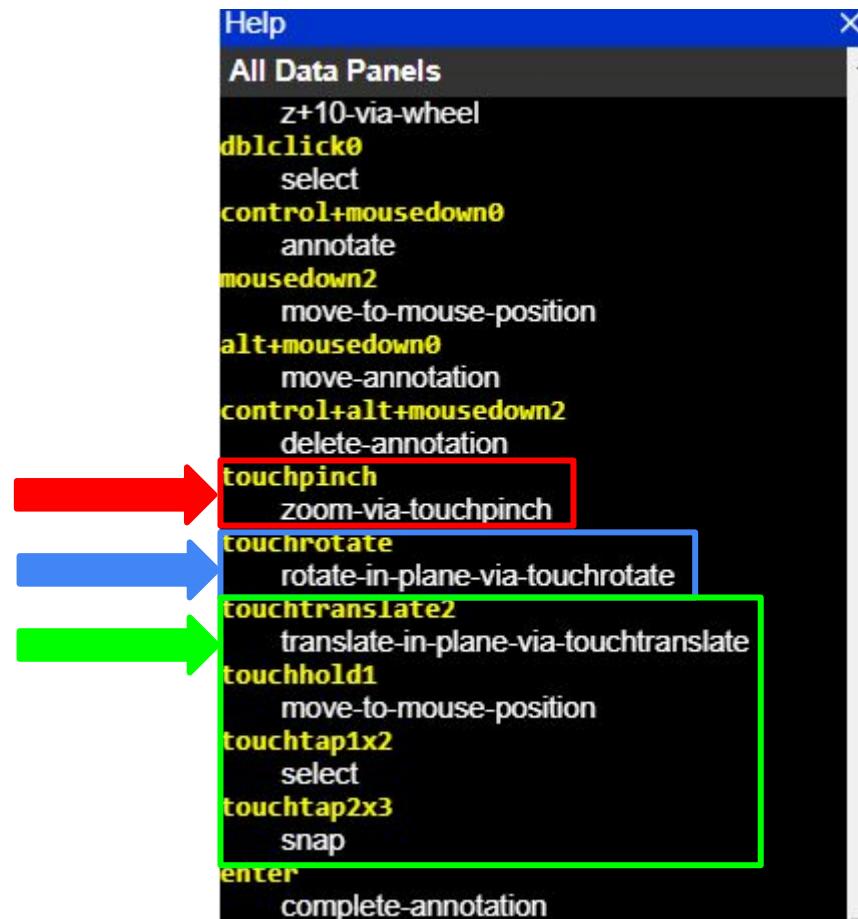


Track-pad specific commands

- touchpinch → zoom-via-touch
 - On trackpad, pinch two fingers together to zoom in on tissue
 - Worked on both Mac/PC
- touchrotate → rotate-in-plane-via-touchrotate
 - Could not get this to work on Mac or PC

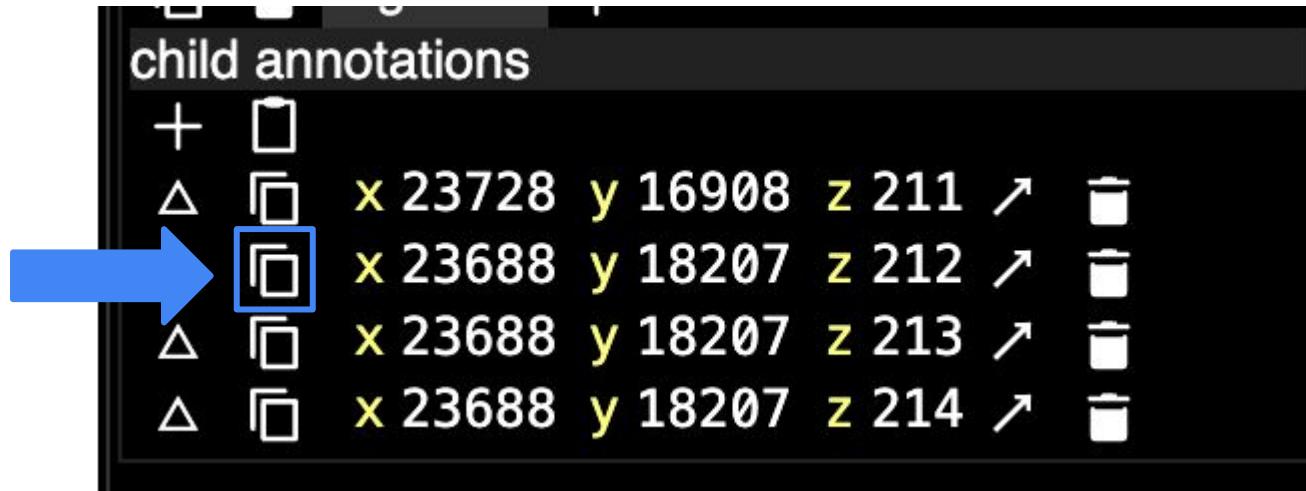
Unsure about what the following commands are:

- touchtranslate2 → translate-in-plane-via-touchtranslate
- touchhold1 → move-to-mouse-position
- touctap1x2 → select



Not included in Help Menu (are there key shortcuts?)

- **Copy** button copies single polygon in volume.
- New **Paste** button location is below the child annotations section - only pops up after you draw the first polygon.



Resuming Polygon Annotations for a Volume

If user leaves NG session and returns later to continue adding polygons to a volume they have to:

1. Select the annotation tab with the volume.
2. Select the volume (selecting will highlight the volume in purple).
3. Click on the + below “child annotations” to continue adding polygons to the same volume - otherwise a new volume will be created.

