

Viewing a PET/CT or SPECT/CT in Sectra Version 1.5

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<http://gamma.wustl.edu/index2.html>

Local MIR NM Access (DNM server)

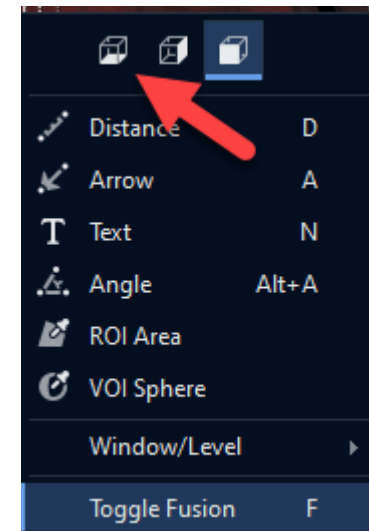
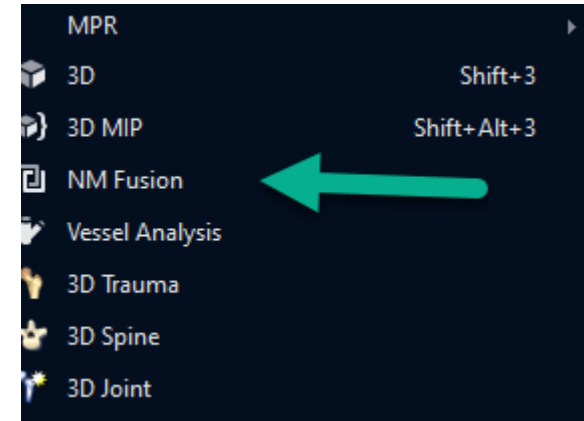
- Sectra [SPECT-PET Viewing](#) and other [Sectra Image shortcuts](#)

Initially fused images will load by default

- This is to make it easy for referring MDs.
- Eventually, you will be able to click the Layout button at the top, to scroll to a new layout that shows the full study.
- For now we need to load the full study manually, as per next slide

To show full PET/CT

- Drag the CT (or the PET) to the appropriate pane
- Right click on it and select NM Fusion
 - Sectra will automatically find the other image set
- To change the coronal fused image to an axial image:
 - Right click on the fused coronal image (upper right) and select the first icon for axial (see red arrow)
 - The “A” shortcut does not work
 - It activates the arrow instead
 - We have put in a request to fix this

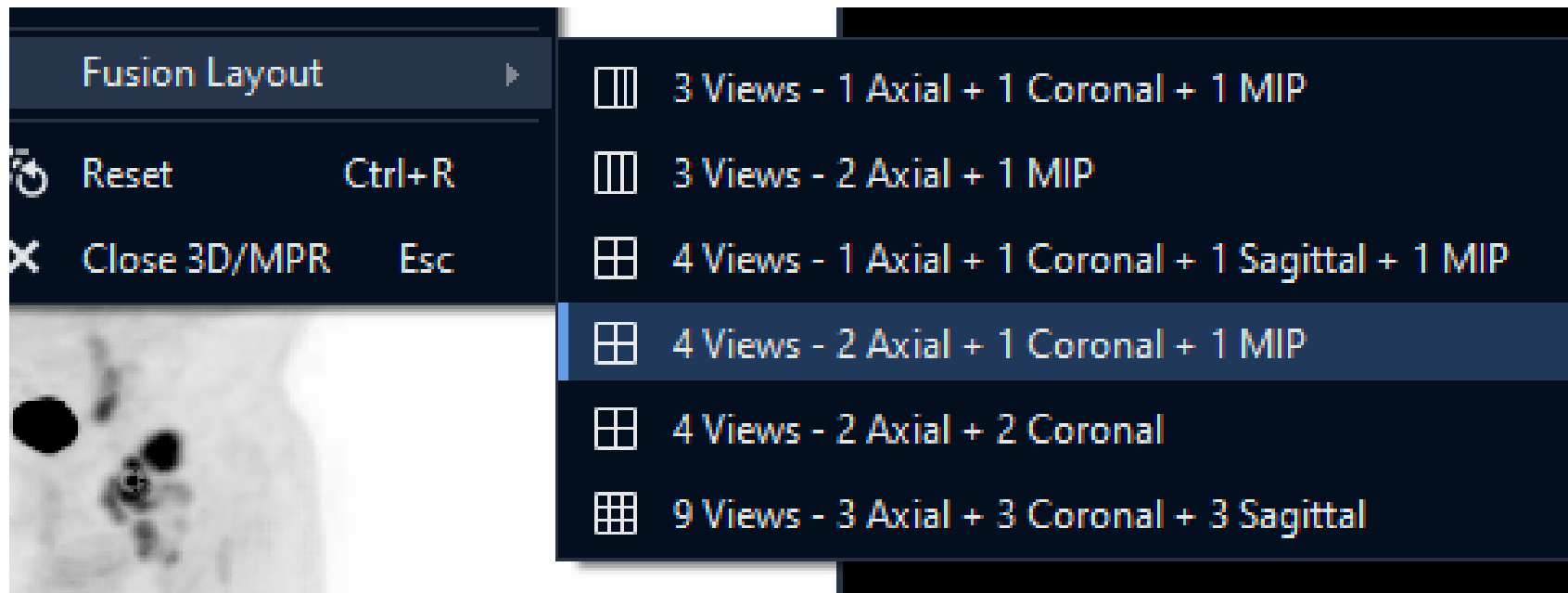


To Show Full-Screen (rather than half)

- Double click on the preview icon (at the bottom) rather than dragging it up, to get a full screen version that can be moved
- Then right click and choose NM Fusion (or press shift-f)
- Avoid this full screen option if you have a prior to display

Other Layouts

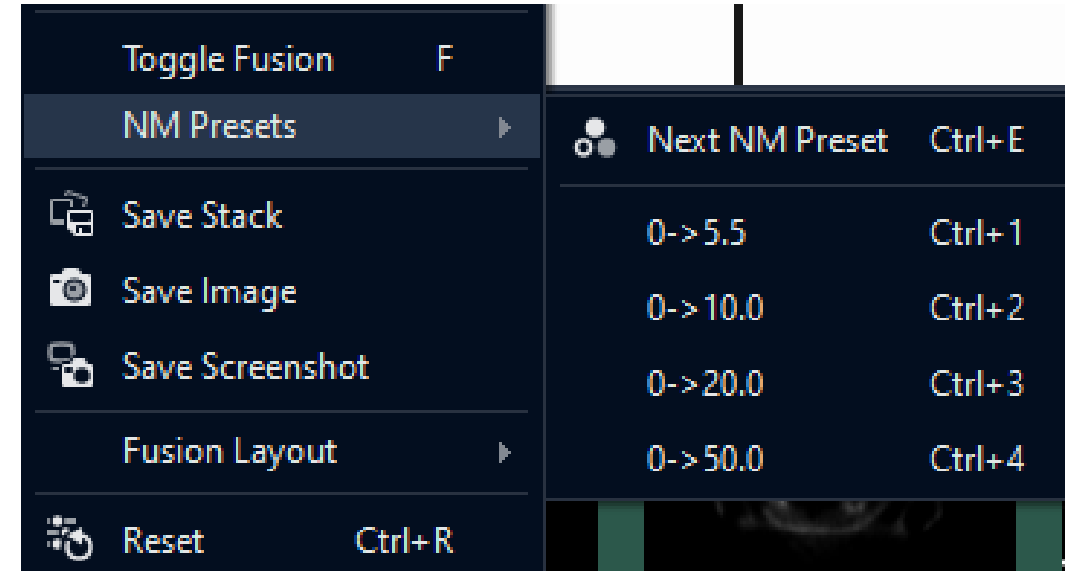
- Other layouts are available with a right-click, **Fusion Layout**
- We default to #4, which best matches our current reading layout (once you change the fused coronal to an axial by right-clicking on it)



Windowing the PET

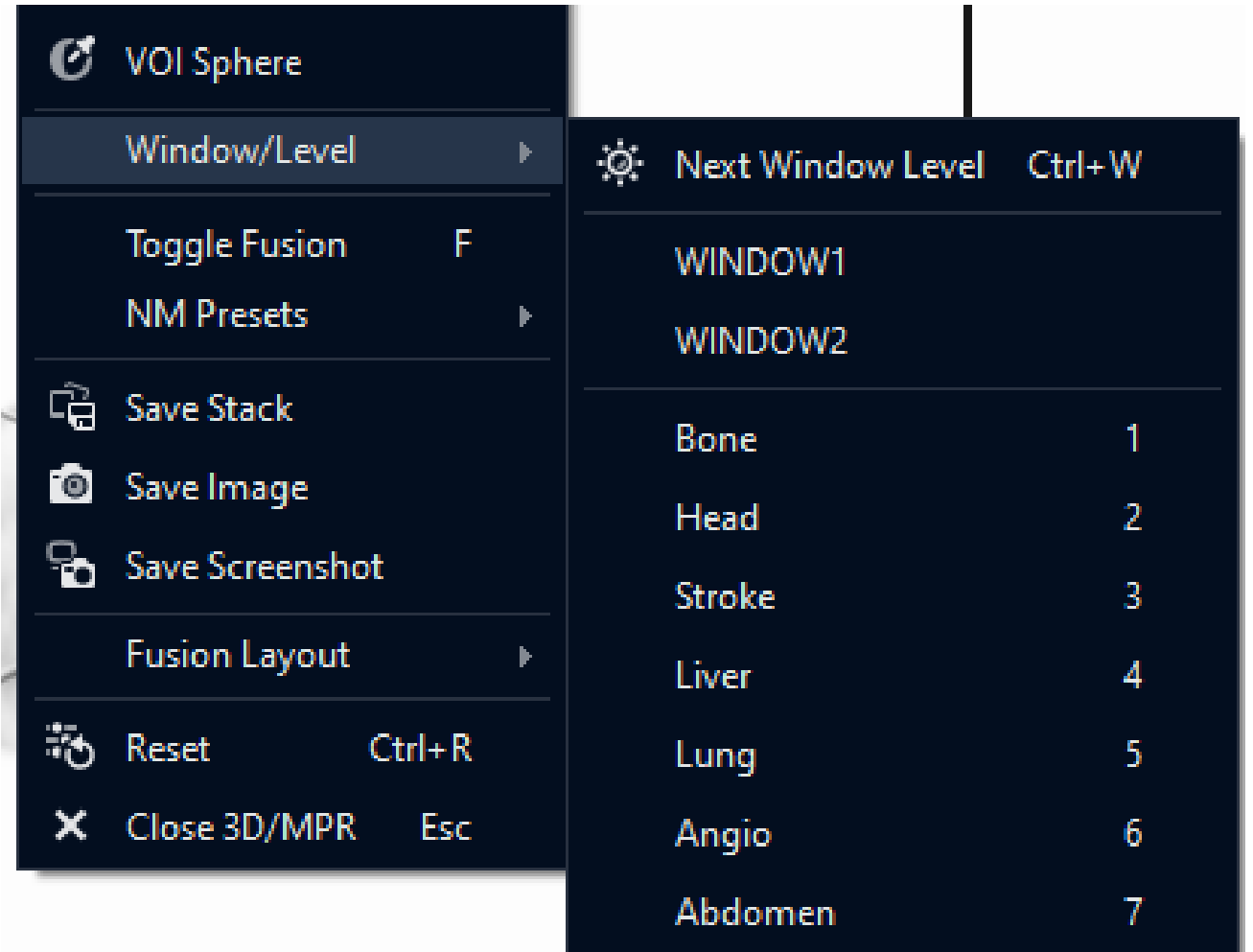


- PET will default to an SUV of 5.0
- You can drag up and down on the colorbar on the left (the lower level is clamped to zero, so only upper level will change)
- To quickly change to a different level, several pre-sets are available with a right-click on the PET image or keyboard shortcut.
 - These presets were revised 5/10/21
- **Control-E scrolls through the presets**
- Note F turns on/off the fusion



Windowing the CT

- Similar controls are available to window the CT
- Right-click to access Window/Level or use keyboard shortcuts



Zooming and other controls

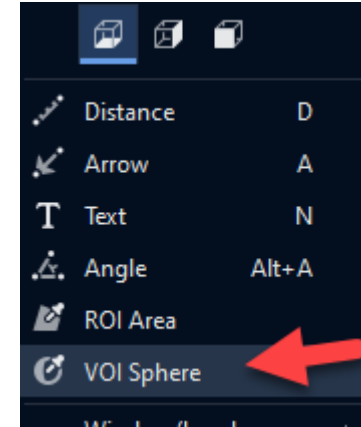
- Hold down Control and drag to **zoom** (make image larger/smaller)
- Double-click on image to occupy “**full-screen**”
- Right-click and drag to **pan** image
- Shift-click and drag to **rotate** image

Moving around and Changing Fusion

- Left click and drag **up/down** to scroll
 - Or use scroll wheel on mouse
 - Page up/down and arrows do NOT work for slice scrolling
 - Can jump to a different body part by clicking on MIP image
- Left click and drag **right/left** to adjust fusion blending
 - F also turns fusion on and off

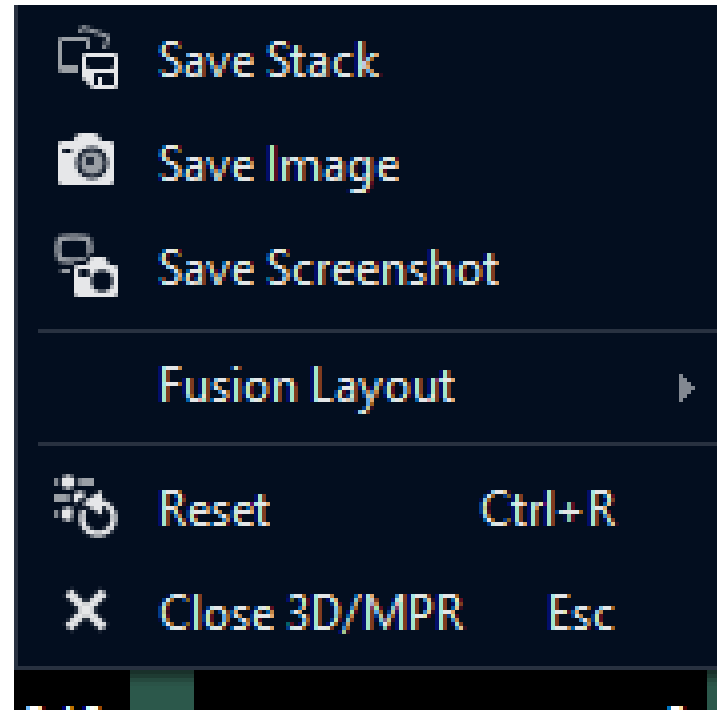
SUV measurements

- Right click on VOI sphere
- Click to set center of VOI
 - Move mouse and click again to set size of VOI circle
 - As you scroll,
 - The thick line shows the actual sphere used for the VOI.
 - The thin line shows the diameter in the slice where the sphere was defined.
- After created, can click to grab edge of circle to select and then drag to change size
 - Dot will appear at center to show you have selected it
- Once selected, can
 - Grab dot at center to move VOI
 - Press delete to remove the VOI
- Hover to see VOI results; you may need to pan image to see the text
- VOIs are not saved with Save Image or Save Stack, only with Save Screenshot



Resetting

- Right-click and choose Reset
- Or use control-R



MIP

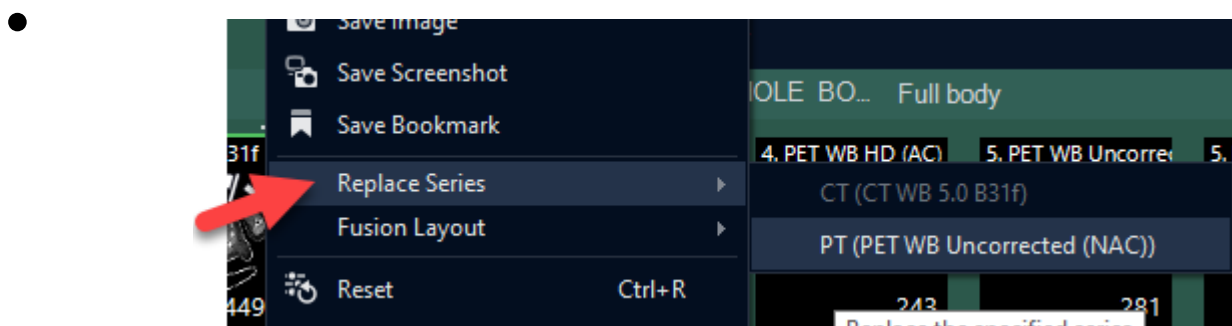
- Does not rotate automatically
- Can click-drag to rotate it, or use mouse wheel
- No depth weighting
- Can click on MIP to navigate to a different part of the body quickly
 - Or hover on MIP and press Q on the keyboard

Comparison with Priors

- You can load a prior study on a second “monitor” (other half screen)
- Registration and synchronized scrolling can be turned on by pressing the x key
 - It works only about 2/3 the time
 - You cannot re-register if the registration is a bit off

Swapping Out Series (NAC, PET-MR)

- To swap out a series, to bring in NAC, right click and use this control



- This will also work to swap in a different series for PET-MR
- This is the preferred platform for reading PET-MR

SPECT/CT

- Works same as PET/CT
- Window level presets are now functional
 - Press control-E to make the image lighter
 - If you go too far, press it a few more times to cycle around
 - Once you are close to desired setting, drag up/down on hot iron color bar to fine-tune the settings

