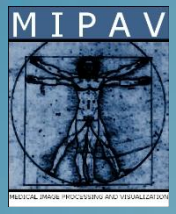
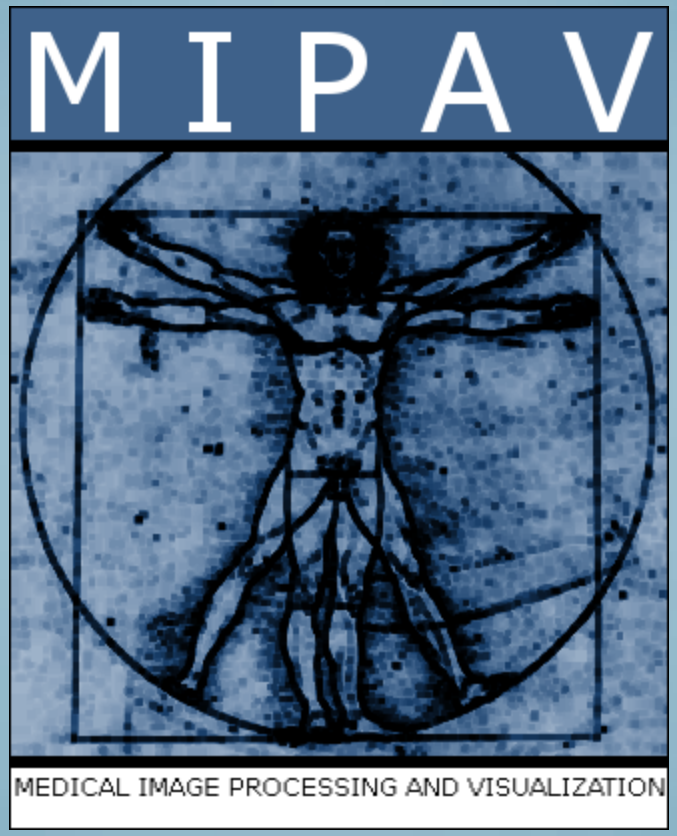
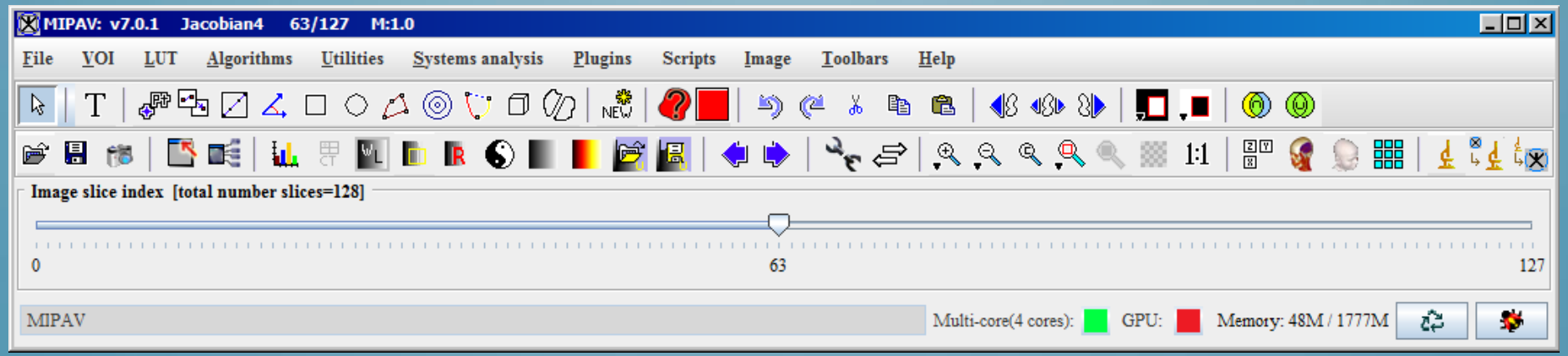


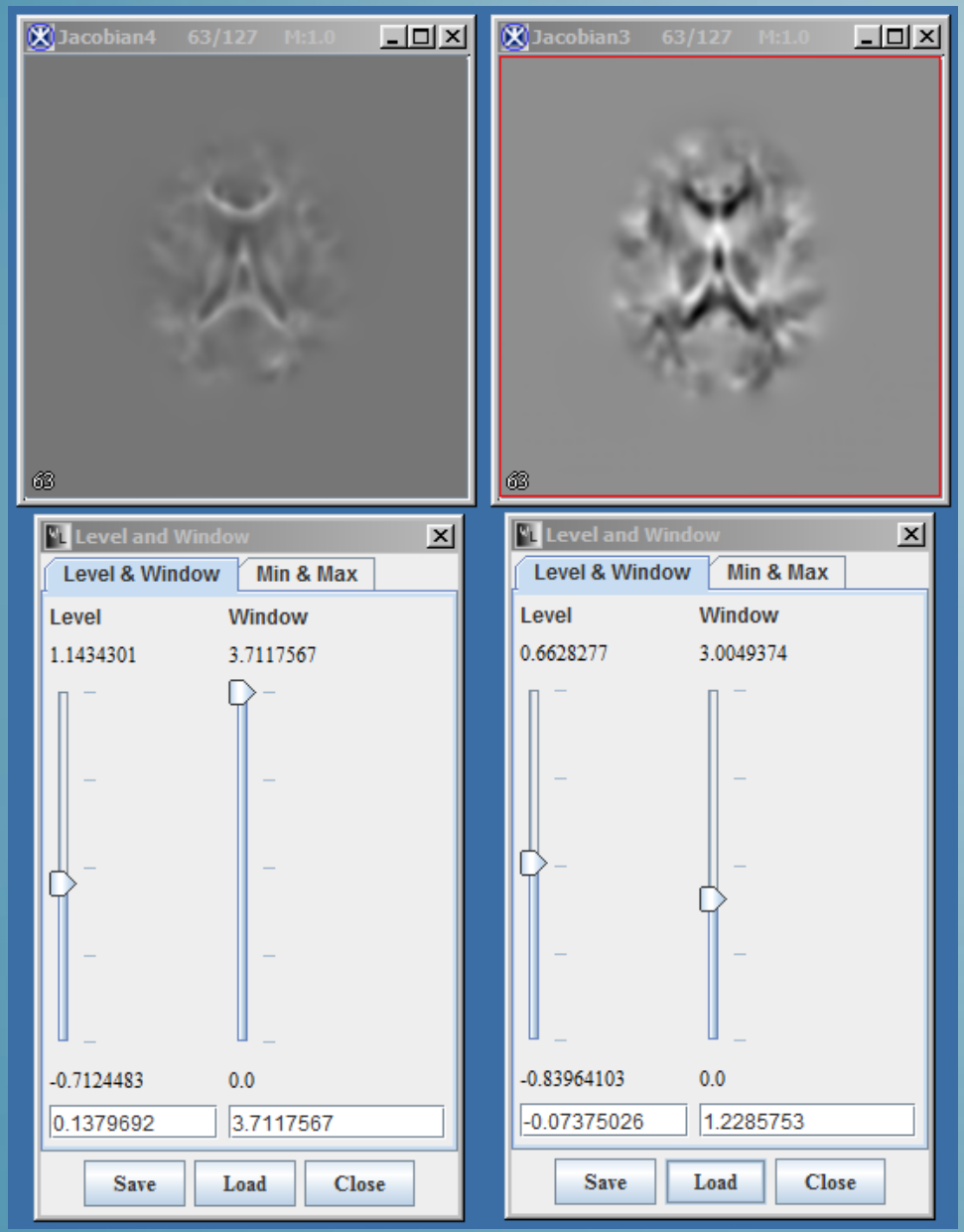
STREAMLINING THE ANALYSIS OF DIFFUSION TENSOR IMAGING FILES THROUGH THE CREATION OF A MASS IMAGE EDITOR

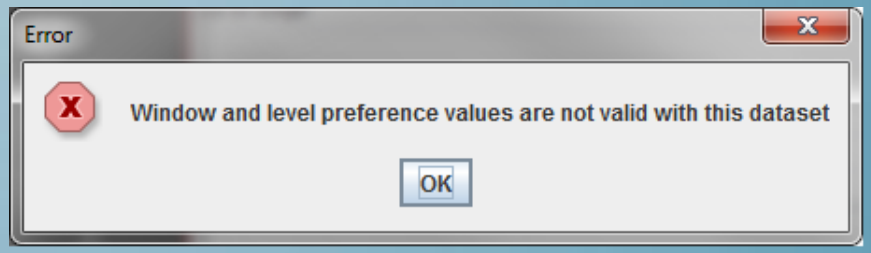
Sara Shen

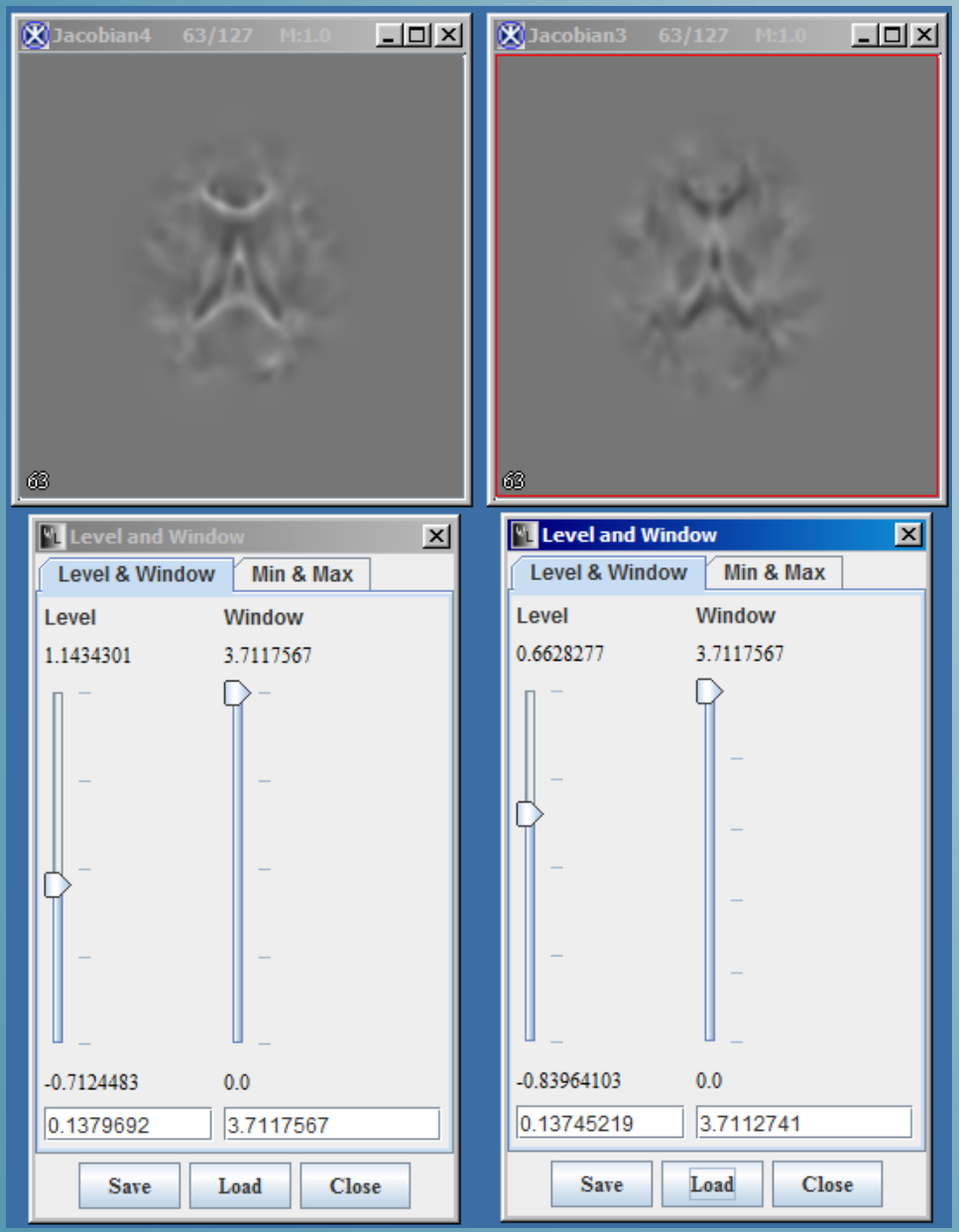
Sara.Shen@NIH.gov

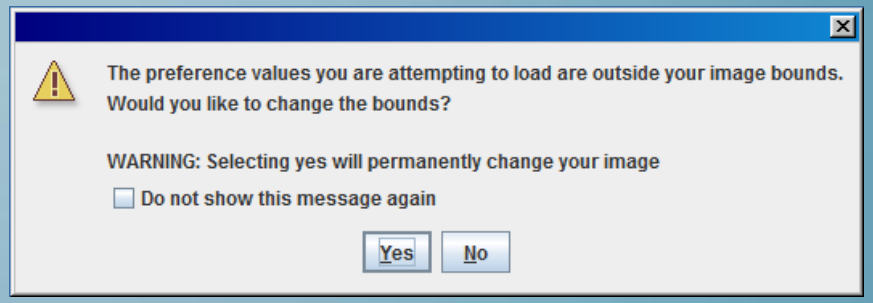

M I P A V
MEDICAL IMAGE PROCESSING AND VISUALIZATION

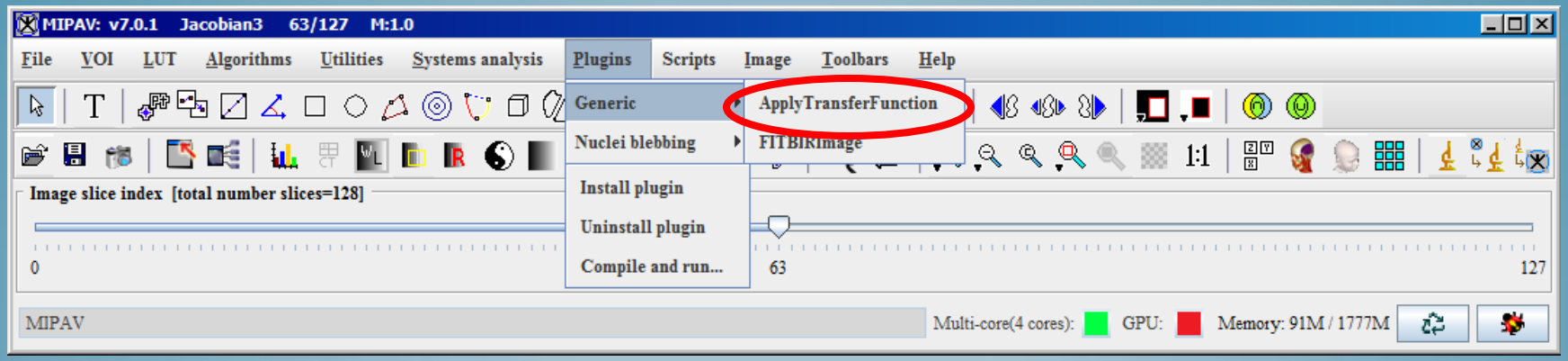

MIPAV: v7.0.1 Jacobian4 63/127 M:1.0
File VOI LUT Algorithms Utilities Systems analysis Plugins Scripts Image Toolbars Help
Image slice index [total number slices=128]
0
63
127
MIPAV
Multi-core(4 cores):
GPU:
Memory: 48M / 1777M

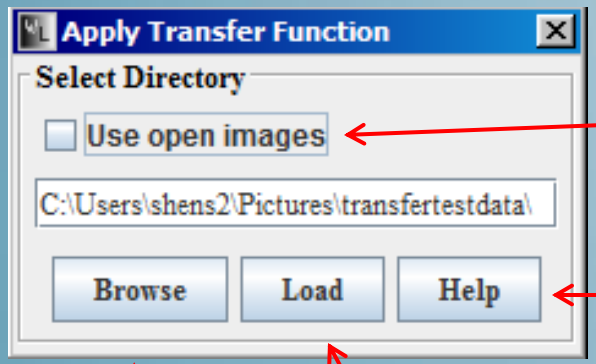

Jacobian4 63/127 M:1.0
63
Jacobian3 63/127 M:1.0
63
Level and Window
Level & Window
Min & Max
Level
Window
1.1434301
3.7117567
-0.7124483
0.0
0.1379692
3.7117567
Save
Load
Close
Level and Window
Level & Window
Min & Max
Level
Window
0.6628277
3.0049374
-0.83964103
0.0
-0.07375026
1.2285753
Save
Load
Close


Error
Window and level preference values are not valid with this dataset
OK


Jacobian4 63/127 M:1.0
63
Jacobian3 63/127 M:1.0
63
Level and Window
Level & Window
Min & Max
Level
Window
1.1434301
3.7117567
-0.7124483
0.0
0.1379692
3.7117567
Save
Load
Close
Level and Window
Level & Window
Min & Max
Level
Window
0.6628277
3.7117567
-0.83964103
0.0
0.13745219
3.7112741
Save
Load
Close


The preference values you are attempting to load are outside your image bounds.
Would you like to change the bounds?
WARNING: Selecting yes will permanently change your image
Do not show this message again
Yes
No



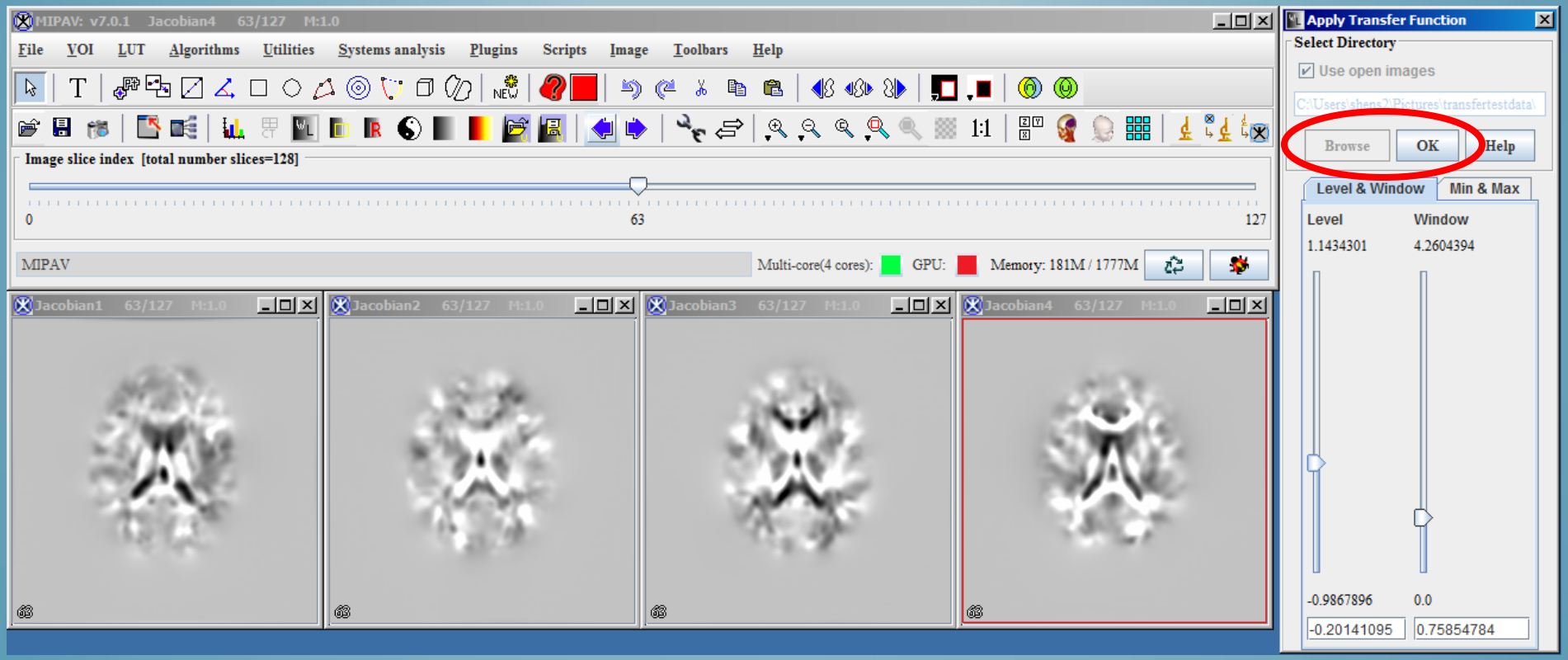


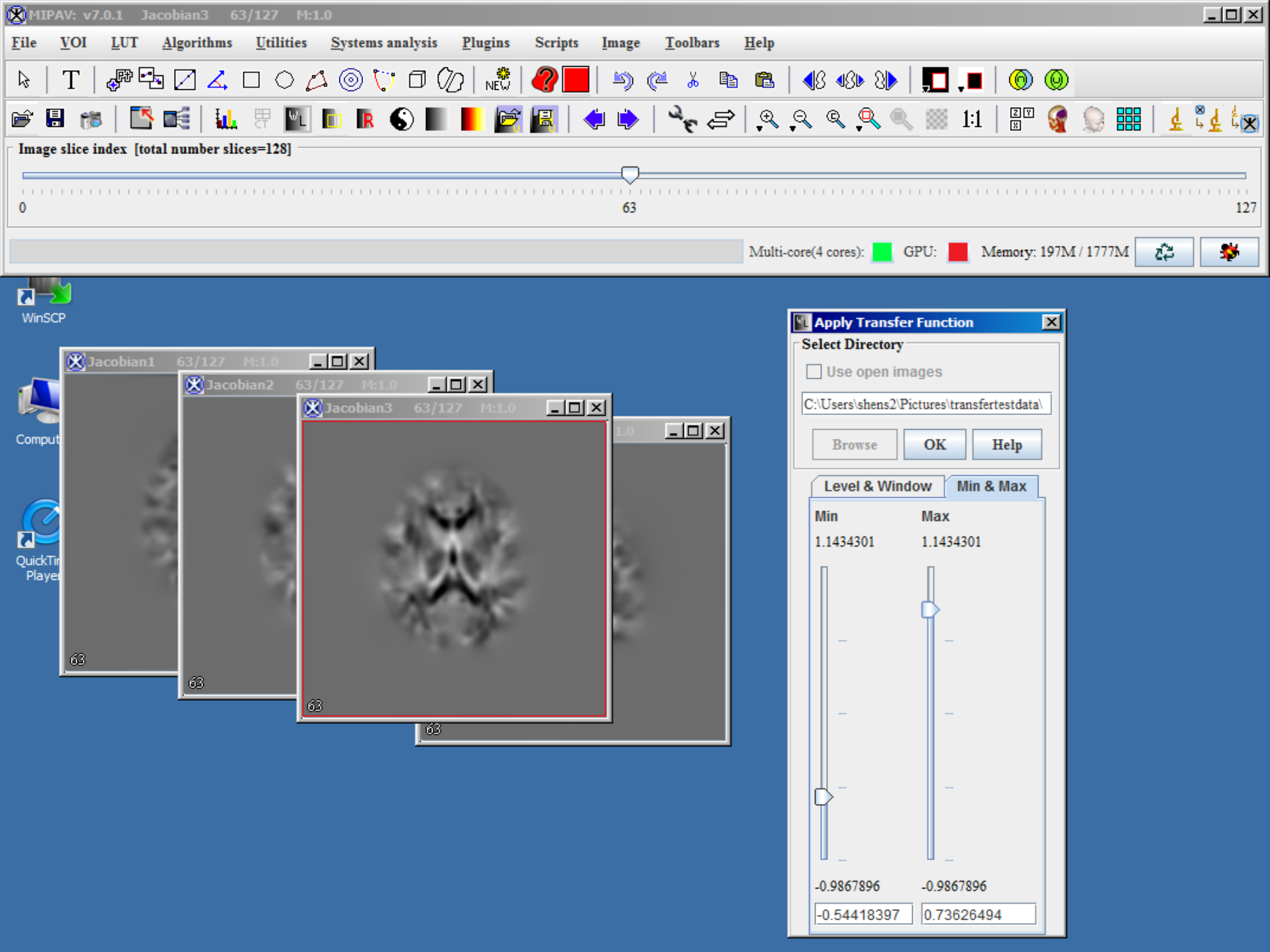
Changes the plugin input mode

Opens the MIPAV wiki article on contrast sliders

Creates contrast sliders that edit all inputted images

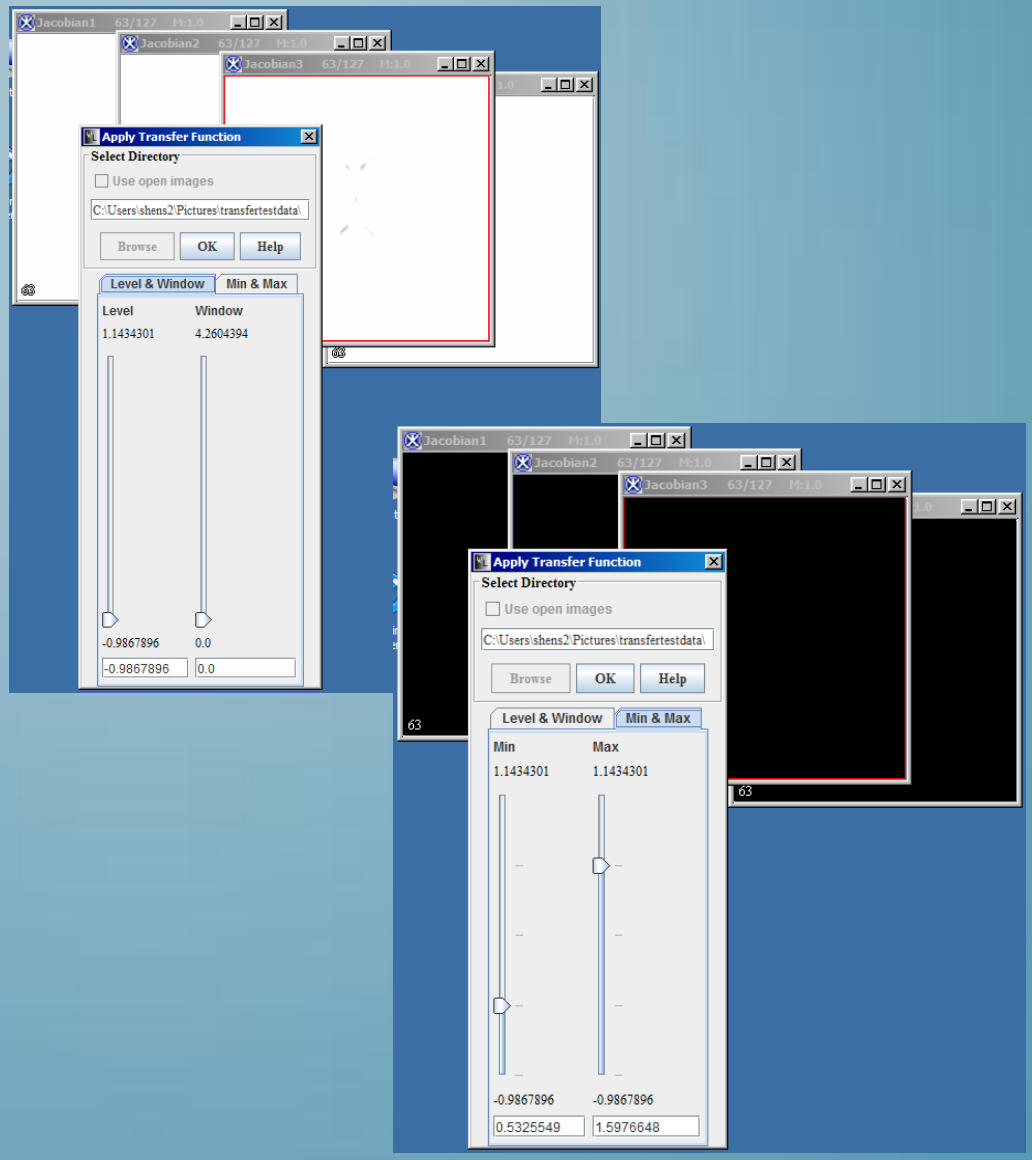
Opens a directory browser


MIPAV: v7.0.1 Jacobian4 63/127 M:1.0
File VOI LUT Algorithms Utilities Systems analysis Plugins Scripts Image Toolbars Help
Image slice index [total number slices=128]
0
63
127
MIPAV
Multi-core(4 cores):
GPU:
Memory: 181M / 1777M
Jacobian1 63/127 M:1.0
Jacobian2 63/127 M:1.0
Jacobian3 63/127 M:1.0
Jacobian4 63/127 M:1.0
Apply Transfer Function
Select Directory
Use open images
Browse
OK
Help
Level & Window
Min & Max
Level
Window
1.1434301
4.2604394
-0.9867896
0.0
-0.20141095
0.75854784


MIPAV: v7.0.1 Jacobian3 63/127 M:1.0
File VOI LUT Algorithms Utilities Systems analysis Plugins Scripts Image Toolbars Help
Image slice index [total number slices=128]
0
63
127
Multi-core(4 cores):
GPU:
Memory: 197M / 1777M
WinSCP
Jacobian1 63/127 M:1.0
Jacobian2 63/127 M:1.0
Jacobian3 63/127 M:1.0
63
Apply Transfer Function
Select Directory
Use open images
C:\Users\shens2\Pictures\transfertestdata\
Browse
OK
Help
Level & Window
Min & Max
Min
Max
1.1434301
1.1434301
-0.9867896
-0.9867896
-0.54418397
0.73626494

CURRENT LIMITATIONS

- *NIFTI files*
- *Directory loading*
- *Default slider values*



FUTURE IMPROVEMENTS

- *Ability to load transfer functions*
- *Tiling images*
- *Histogram compatibility*
- *Compatibility with other image file types*

ACKNOWLEDGMENTS

- *Carlo Pierpaoli's Team at NICHD*
- *Matthew McAuliffe*
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- *Evan McCreedy*
- *And the rest of the MIPAV team*