Image Quality Assessment Plug-in (RMSE and SSIM)

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• Select two series:

• Click “2D Viewer”
• Then, two viewers will be shown:

![Image of two viewers]

• Click the icon of one viewer and drag it into the other viewer:

![Image of fusion window]

• Then, the fusion window will pop up:
• Select “Quality Assessment” plug-in to run Quality Assessment:

![Quality Assessment image]

Squared Error and RMSE

• Check “SE (Squared Error)” button

![Squared Error image]

• Check “Normalize by Maximum” if you’d like to normalize squared errors and RMSE by maximum signal
Squared Error and RMSE

- Click “OK” to generate a squared error map

- RMSE is shown next to the title

Structural Similarity Index Map (SSIM)

- Check “Structural Similarity Index Map (SSIM)” button

- Click “Options” if you’d like to change optional parameters for SSIM
Structural Similarity Index Map (SSIM)

• Default values (recommended from the below website) are shown:

https://ece.uwaterloo.ca/~z70wang/research/ssim/

• Click “OK” to generate a SSIM map

• Mean SSIM (MSSIM) is shown next to the title
• RMSE:
  http://en.wikipedia.org/wiki/Root_mean_square_deviation

• SSIM:

  https://ece.uwaterloo.ca/~z70wang/research/ssim/

  http://en.wikipedia.org/wiki/Structural_similarity