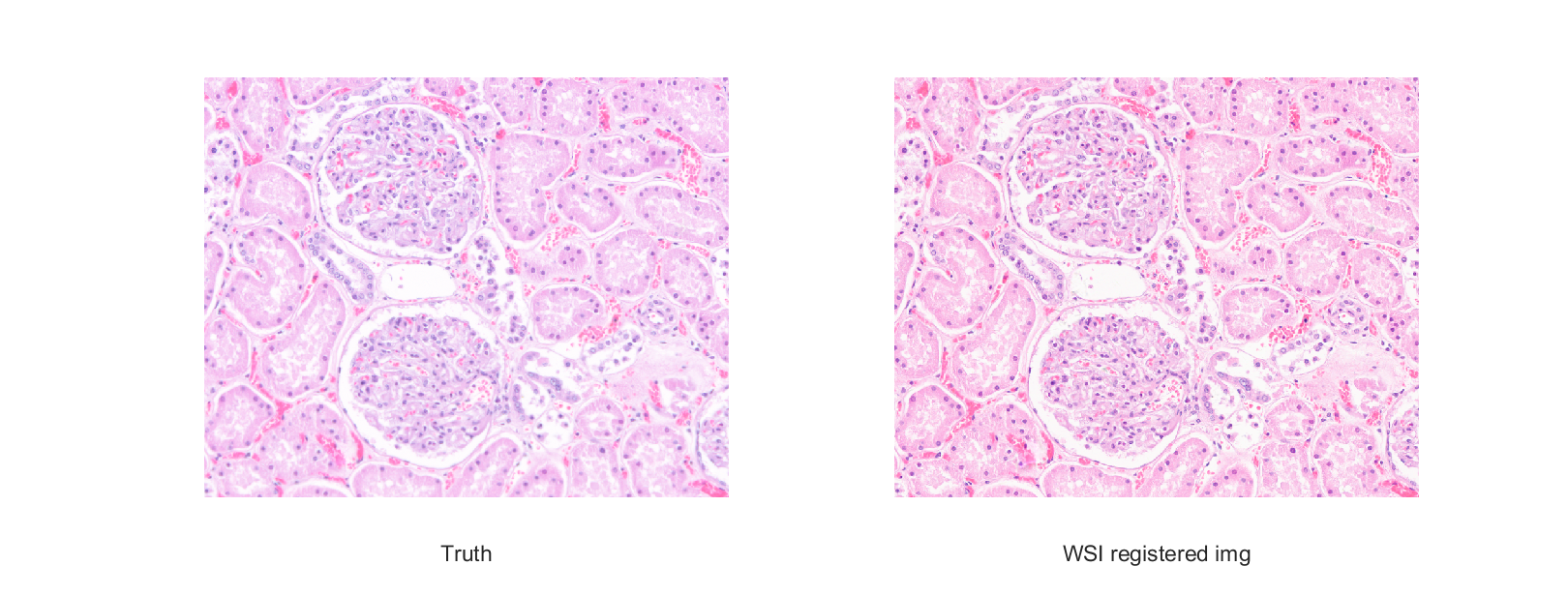
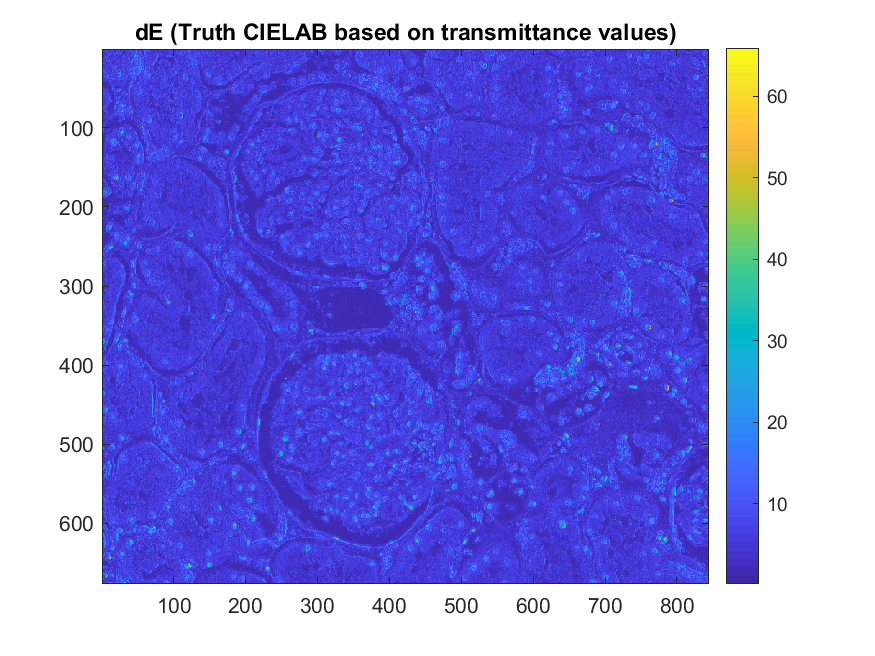
Kidney

# Truth versus WSI (Leica)



# CIELAB difference using the SRGB values from the WSI image and the CIELAB values from the measurements of the truth by the HIMS





# Principal component analysis

Wavelengths 380 nm and 780 nm are removed from the dataset (no signal at these wavelengths).

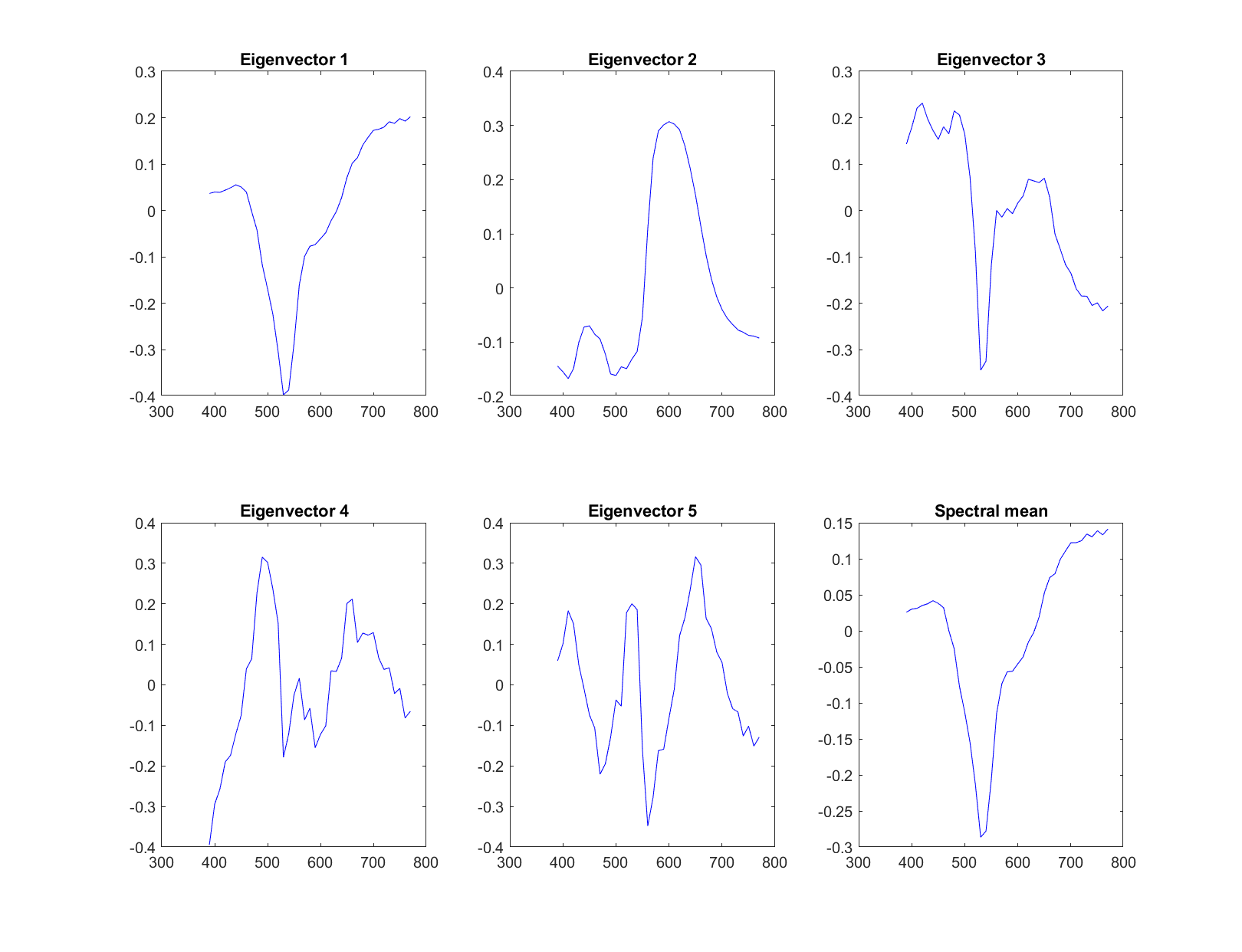
Data: = (676 x 844) x 39

The data are centered, subtraction of data\_mean (along rows)

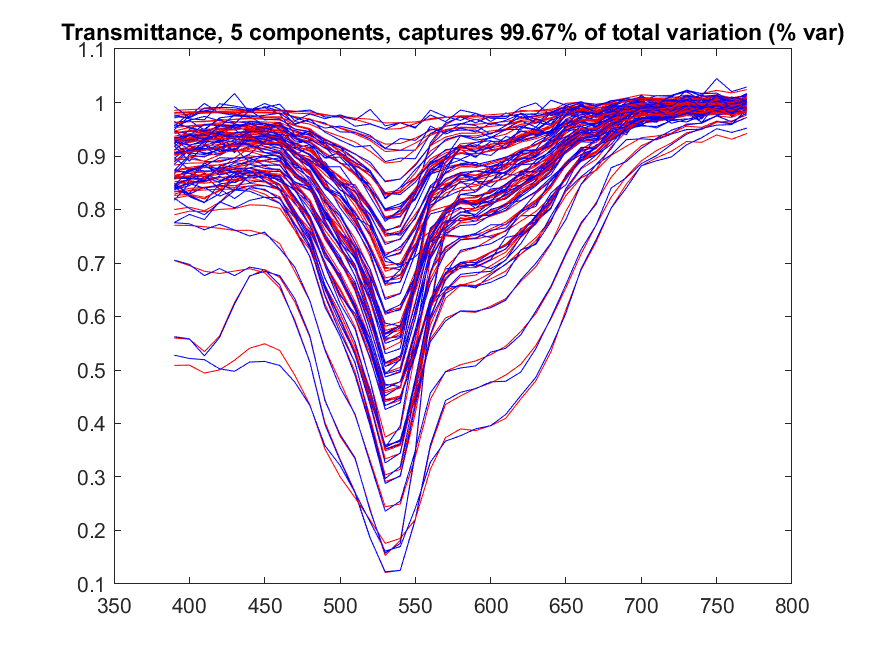
SVD

Reduction of data using 5 eigenvectors

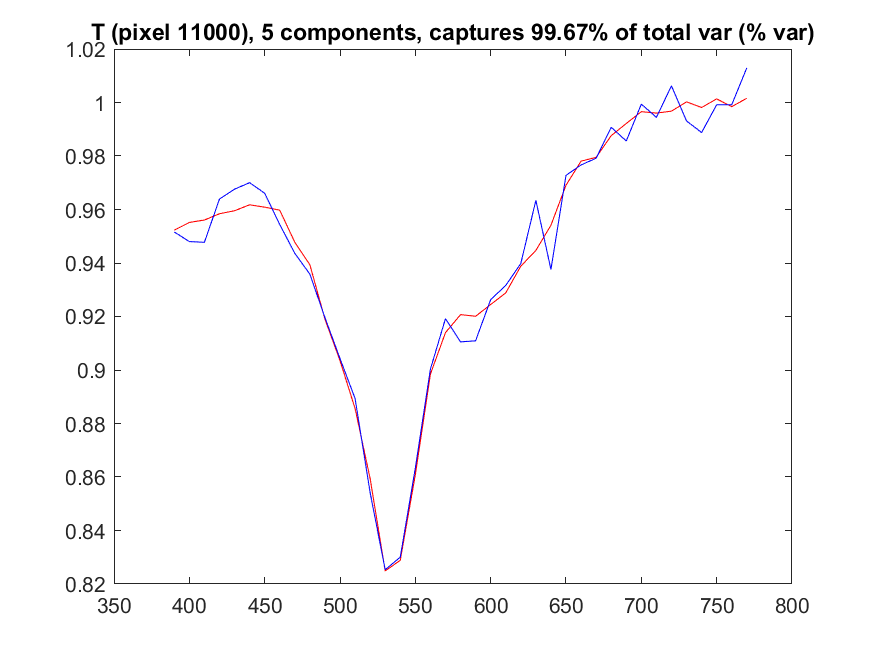
Reconstruction of dataset (no centered)

5 eigenvectors and spectral mean of the image

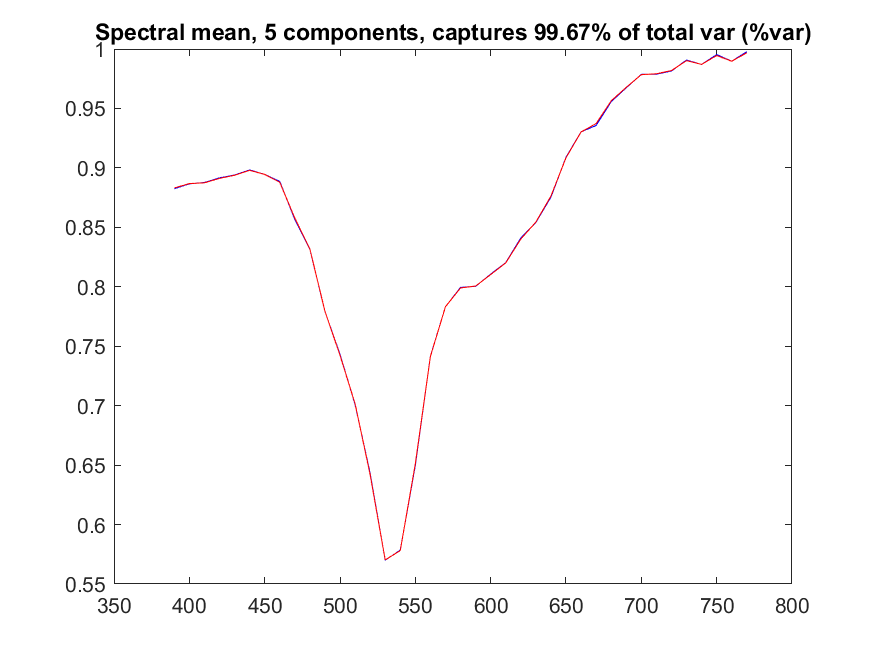
# Reconstruction of spectra for a sample of 20-or-so pixels chosen over the images using 5 eigenvectors



# Reconstruction of spectra of one pixels using 5 eigenvectors

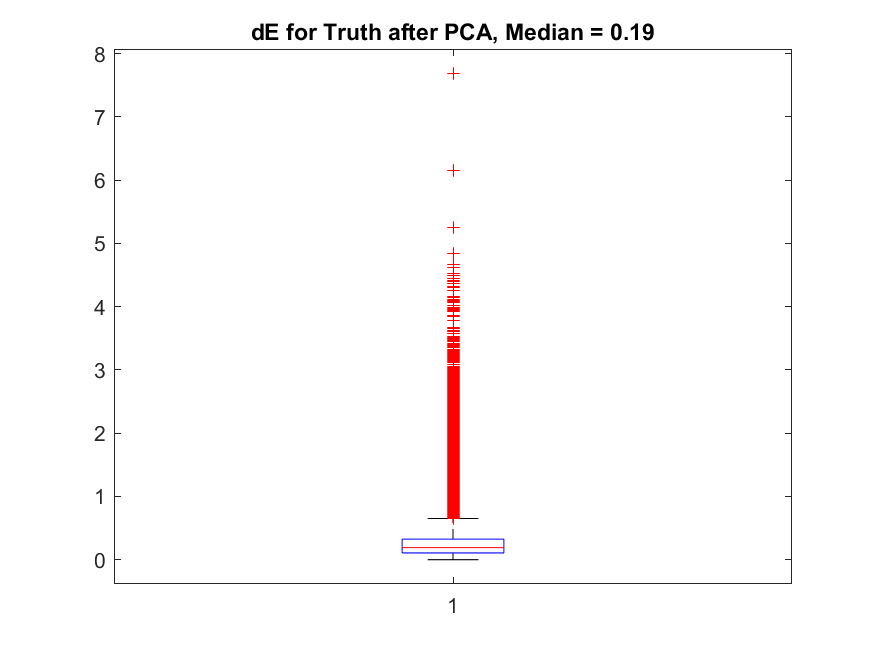


# Reconstruction of mean spectra of the image using 5 eigenvectors

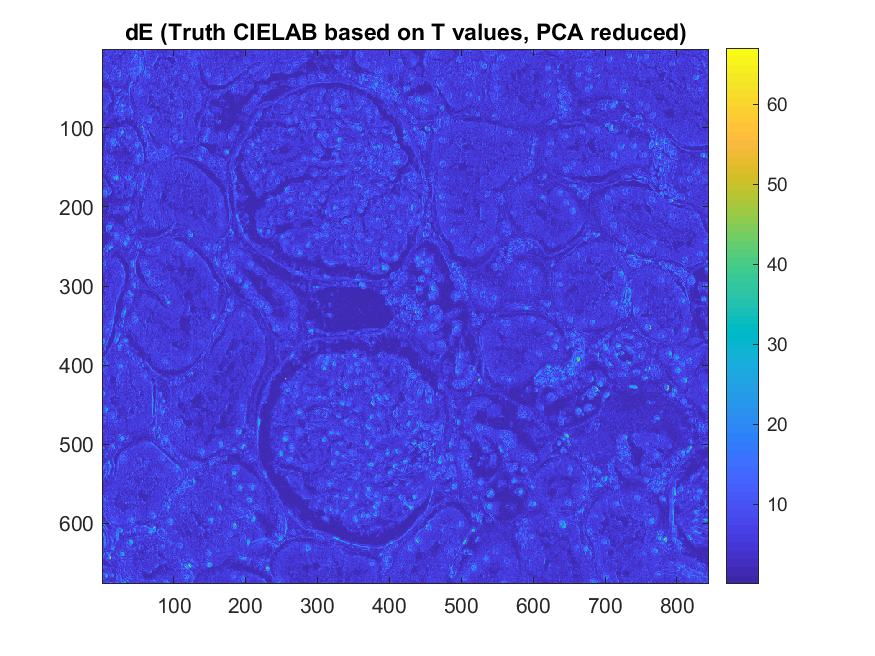


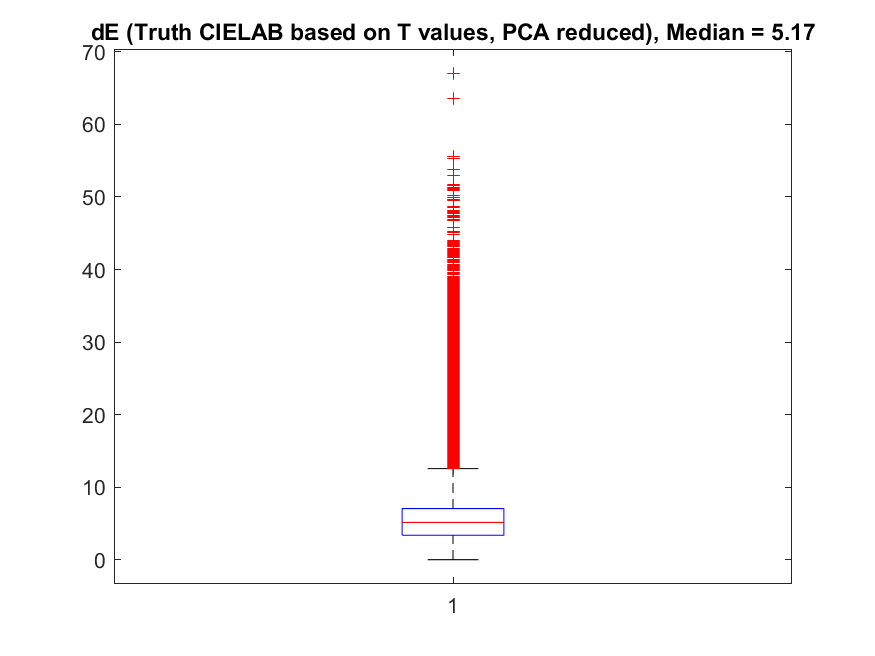
# Difference between original Truth image and the one reconstructed using 5 eigenvectors





# Difference between WSI image and Truth image reconstructed using 5 eigenvectors



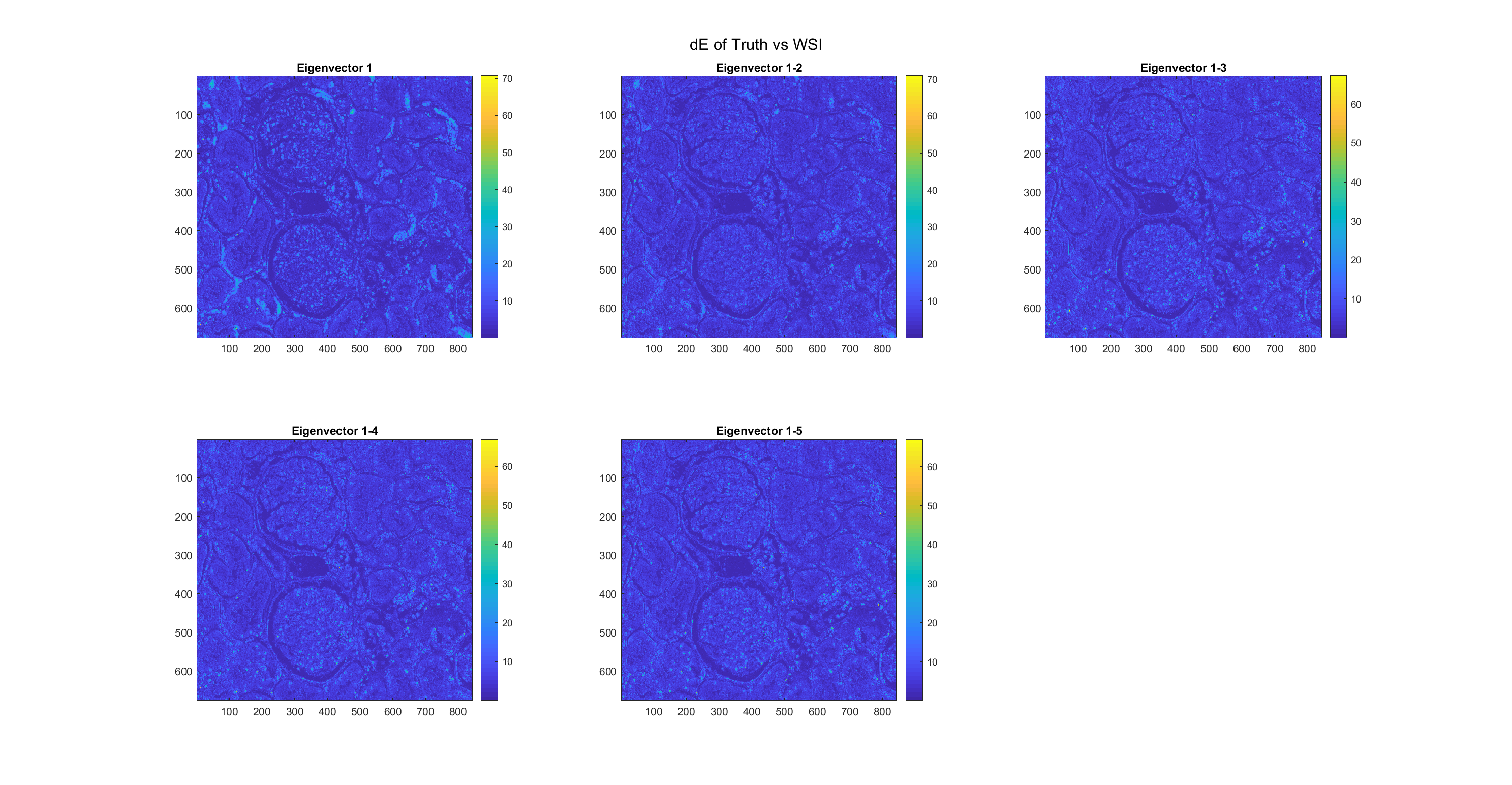


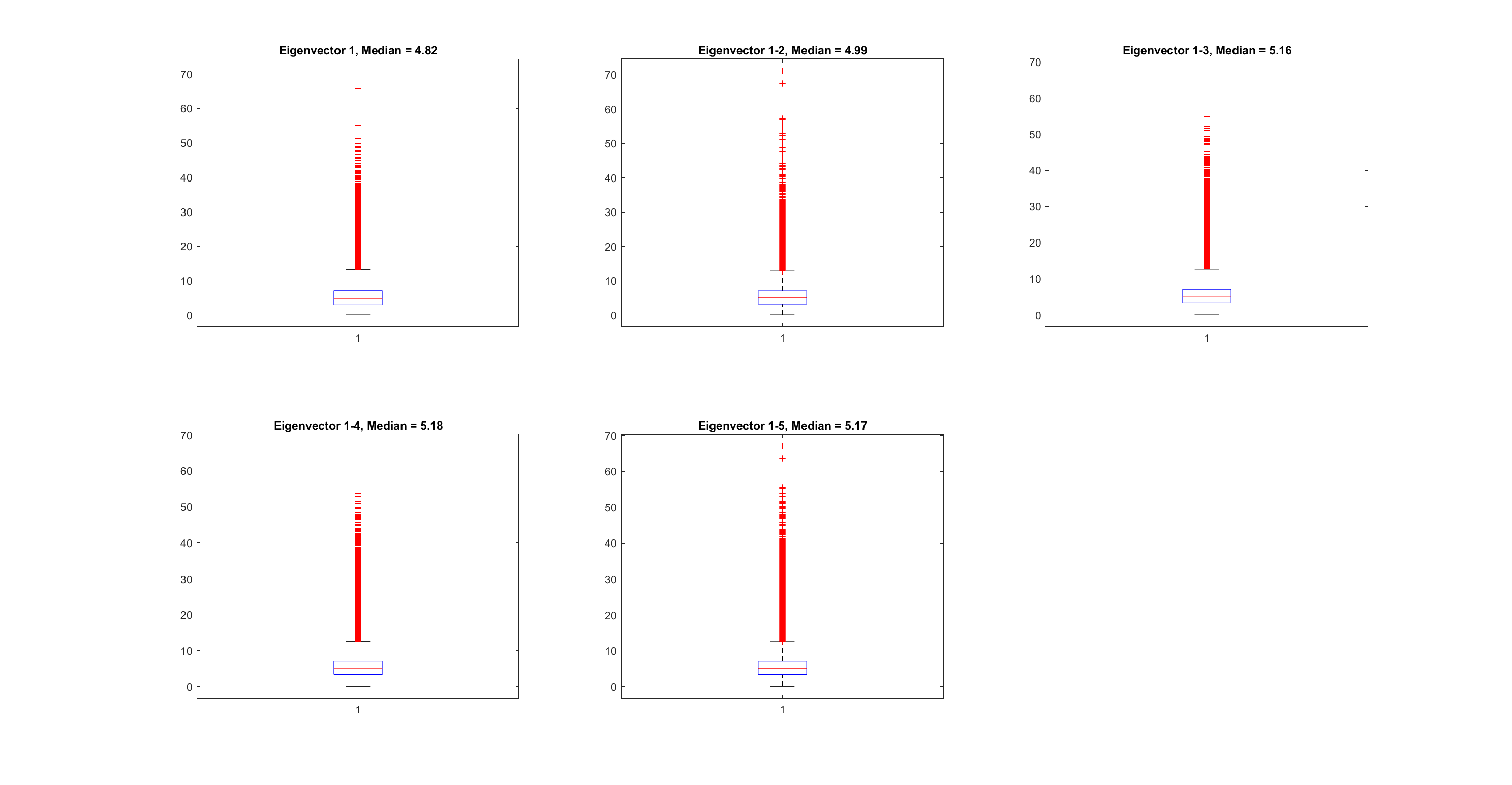
# Heatmaps of dE between WSI image and Truth images

Reduction of data using the 5 eigenvectors

The reconstructed data based on:

with k = 1..i and i = 1..5

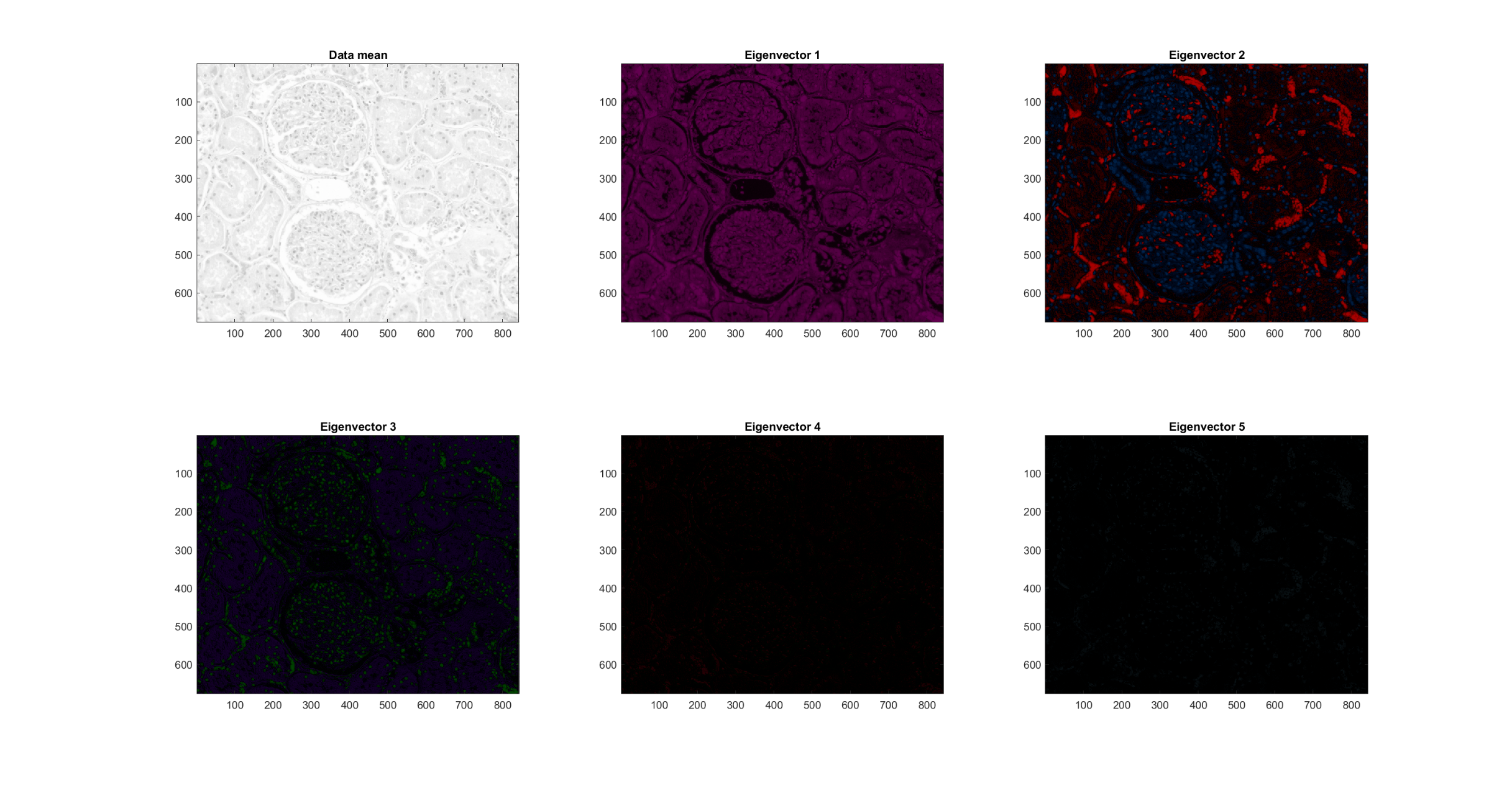




# sRGB images for and each eigenvector component

Transformation to CIEXYZ (linear transformation) and convert to sRGB (nonlinear transformation)

with k = 1..5, that is for each eigenvector.



# sRGB image reconstructed using and 5 eigenvector components

From XYZ coordinates and

