

Denoising results for PES-TV algorithm with different λ values

We tried various λ values between 0.2 and 2 and $\lambda = 1$ produced the best results. The PSNR for denoising results for images corrupted by “salt & pepper” noise with density $d = 0.05$ plus Gaussian noise with variance $\sigma=30$ for $\lambda = 0.5, 1,$ and 1.5 is presented in the following table. The PSNR (dB) values for the case with $\lambda = 1$ is higher than the other two cases with $\lambda = 0.5$ and 1.5 .

Images	$\lambda = 0.5$	$\lambda = 1$	$\lambda = 1.5$
cameraman	29.54	31.19	31.03
house	30.42	33.66	32.95
flower	27.79	28.16	28.01
lena	29.23	30.59	30.27
jetplane	29.05	30.14	30.02
lake	27.79	28.35	28.12
peppers	29.31	31.16	30.97
livingroom	27.80	28.19	28.03
mandrill	26.29	26.39	25.54
pirate	27.83	28.44	28.13