

July 11 2003. DEBLURRING OF VLADAR'S TENNIS BALL IMAGES.

1. As in the grass images, your 11 'tennis ball' images were resized to 1024x768 and centered in a 1024x1024 array.
2. The table below contains all the pertinent information we shall need regarding the detected parameters α , β , which reflect the shape of the electron beam. A larger value of α generally indicates that the beam was wider, and must have caused more blurring.... In these tennis ball images, sharpening by about 18% seems typical, versus about 16% in the grass images.
3. As in the grass images, deblurring was terminated according to the 'radiant flux conservation' criterion that we discussed together last April....We monitor the image's L^1 norm as we march along the sequence...When that norm exceeds the original image's L^1 norm by about 1% or so, we stop. At the same time, we monitor the TV norm...it should increase as we march along the sequence, indicating sharpening...

<i>Image</i>	<i>Effective α</i>	<i>β</i>	<i>Initial TV</i>	<i>Final TV</i>	<i>TV Increase</i>
Vlad24Res2-1	0.03507	0.1447	13841	16492	19.16%
Vlad24Res2-2	0.03875	0.1390	9285	10962	18.07%
Vlad24Res2-3	0.05680	0.1093	12600	15095	19.79%
Vlad24Res2-4	0.04802	0.1209	6001	7120	18.66%
Vlad24Res2-5	0.03868	0.1417	10191	11996	17.71%
Vlad24Res2-6	0.04858	0.1262	5420	6294	16.11%
Vlad24Res2-7	0.03783	0.1341	7585	8853	16.73%
Vlad24Res2-8	0.05434	0.1161	6183	7125	15.24%
Vlad24Res2-9	0.04114	0.1346	9984	11822	18.41%
Vlad24Res2-10	0.03011	0.1619	13552	15926	17.51%
Vlad24Res2-11	0.03467	0.1509	12891	15221	18.08%