

July 8 2003. DEBLURRING OF VLADAR'S LARGE GRASS IMAGES.

1. Your original 16 grass images were 2560x1920. These were resized to 1024x768. All 16 deblurred images are 1024x1024 (1024x768 centered on 1024x1024)
2. The table below summarizes the results of deblurring. Effective α and β refer to the parameters of the detected point spread function for each image. These values are fairly consistent. Typically $\alpha \approx 0.03$, $\beta \approx 0.15$. However, note that Images 3, 9, and 10 appear different from the rest..... TV refers to the 'total variation' norm, which measures the sharpness of the image. 'Initial TV' is the TV norm of the input image, 'Final TV' is the TV norm after APEX-processing. Again there is a fair degree of consistency in these values, except for images 3, 9, and 10. Sharpness increases are on the order of 15% typically.

<i>Image</i>	<i>Effective α</i>	<i>β</i>	<i>Initial TV</i>	<i>Final TV</i>	<i>TV Increase</i>
Vlad24Res1-1	0.02395	0.1765	17347	19940	14.94%
Vlad24Res1-2	0.03405	0.1515	12961	14737	13.70%
Vlad24Res1-3	0.04303	0.1309	10078	11624	15.33%
Vlad24Res1-4	0.02027	0.1914	20472	23630	15.42%
Vlad24Res1-5	0.02737	0.1588	19363	22280	15.07%
Vlad24Res1-6	0.03317	0.1446	14507	16966	16.95%
Vlad24Res1-7	0.03854	0.1426	15078	17401	15.41%
Vlad24Res1-8	0.03769	0.1480	10763	12436	15.55%
Vlad24Res1-9	0.04696	0.1293	7828	9118	16.48%
Vlad24Res1-10	0.04544	0.1273	7398	8748	18.25%
Vlad24Res1-11	0.03130	0.1563	17759	20735	16.76%
Vlad24Res1-12	0.02847	0.1613	14494	16936	16.85%
Vlad24Res1-13	0.03257	0.1613	14201	16130	13.58%
Vlad24Res1-14	0.02797	0.1697	21473	24563	14.39%
Vlad24Res1-15	0.03141	0.1525	21579	25124	16.43%
Vlad24Res1-16	0.02552	0.1726	22812	26372	15.60%