January 2, 1998

Dr. Andreas Buja, editor
Journal of Computational and Statistical Graphics
AT&T Labs Research
Room C209
180 Park Avenue
Florham Park, NJ 07932-0971

Dear Andreas,

Enclosed is a revision of the JCGS submission #96007, by Adak, Johnston, Neumann, Patil and I. Sorry for the very long delay on this, caused mostly by me taking a while to learn MATLAB (the old graphics were done in Gauss, which doesn't have the capabilities to do a lot of what was requested).

We found most of the reviewers suggestions to be right on target and we are very grateful for them. Most concerned the graphical presentation, and we believe we have been successful in addressing the concerns raised. In addition, we have added a MATLAB browser, available on the web, which gives the interested reader the capability to make essentially these plots in the paper, plus many more. Details on obtaining this are now given near the end of the introduction.

Most of the suggestions have been installed and don't seem to need further comment. Places which appear to need further discussion are:

<u>Associate Editor</u>:

Summary: A very good idea. Among the suggestions of "new section at the end" and "in the Introduction", we went for the latter. This is mostly because I am on record as saying that the introduction is preferable (see Marron (1998) "Good writing in Mathematical Statistics", to appear in *Statistica Neerlandica*, for discussion of my reasons). However I am aware that others have other views on this point, so if you or the reviewers have really strong feelings to the contrary we can add a new section at the end.

Figure 2: Great idea, we have done this.

Figure 4: We like the idea of reducing jaggies, by going to $n = 256$, and have done this. About adding a new Figure, we are pretty refreshed by the suggestion of adding a figure (most

such requests are for deletion!). We thought hard about doing this, but finally decided against it. The main reason that it there aren't so many new lessons than what already appear in the two lower right Power Remaining plots (I was intrigued by the suggestion that we are too well trained about saving journal space, but we hope the browser will give the serious reader access instead). Also it would involve a little more revision of our MATLAB Browser than we feel is warranted (since it is organized around figure numbers in the paper, and these would all change).

Referee:

p. 2: we agree that it is an "isometry", and thought that was the same as "rotation", but the latter was more intuitively clear, so we have left this. ??? have I got this right? ???

p. 3 (end): ??? Iain: What about this? I thought the 10 Lectures book was the best source for actual implementation? Should we change this to 1988, or rebut? ???

p. 4 "simpler": We agree that "simpler" has to get down to personal opinion. However, we think there is substantial grounding for our view on this matter. In particular it takes a full lecture to explain the FFT, while the fast wavelet transform is simply explained in just a few minutes. ??? I wonder if we should delete this, as it could be a lightning rod for further debate? ???

p. 7 (first): ??? I think this is right, so I put it in, but please verify. I also squared the theta that appears in the definition of $i(\sigma)$ three lines below. ???

p. 7 (second): ??? Here again some verification is needed. It seems to me that the first term should get a factor of $\frac{\sigma^2}{n}$, so that is what I did (slightly different from the referee's recco) ???

Best Wishes,

Steve Marron