
Subject: IDL User Group Meeting Huge Success: Correction
Posted by [David Fanning](#) on Fri, 17 Oct 2008 20:55:45 GMT
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Folks,

I wrote in my User Group Meeting review yesterday:

- > Peter Messmer continues to up the performance
- > of GPULib, using graphical processors to increase computationally
- > expensive operations from 20-100%.

Unfortunately, I got this wrong. The numbers are not 20-100 *percent*, but 20-100 *times* as fast!! Someone who knows more about this than I do, had this to say:

The GPULib performance improvements described by Peter Messmer from Tech-X Corp are on the order of 20 to 100 *times* (versus percent). If you take this a step further and write custom kernels using the NVIDIA CUDA library directly, you can achieve results many times even this remarkable number. GPU processing has the potential to open up an entire universe of problem sets that researchers would not have even considered up until now because the computations would have otherwise required supercomputing time.

I understand Mort Canty tried this on a PCA analysis on just a regular run-of-the-mill graphics card and found a 17 *times* improvement in performance. When you are working with large satellite images, as I am, this gets your heart beating a little faster. The 100% numbers Peter was talking about came, as I understand it, on high-end graphics processors that cost in the neighborhood of \$1500. Not very much to pay for near-supercomputer processing power.

Sorry for the confusion.

Cheers,

David

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")
