Subject: Re: Different FFT times for same array size ?
Posted by R.G. Stockwell on Wed, 24 Aug 2005 16:54:04 GMT
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"Jan Cami" <jcami@mail.arc.nasa.gov> wrote in message
news:1124862926.625619.103650@g43g2000cwa.googlegroups.com.. .
> Hi,
...
> So the first 28 segments go fast, and from then on things slow down by
> a factor of 50 (well, except those 2 funny ones) !!

Off hand, the factor of 50 increase I would say is due to a
memory "leak" issue. Perhaps at that point, you start to swap to
disk or something. This is just a guess, but often a huge step in
execution time means your process has had to go to the hardrive.
[by leak, it may not be a real leak, but just the fact that
you are running low on memory, and are swapping to disk
to get the rest of the data]

How does it look if you run the same code on the same input
time series (i.e. always fft the same array by
commenting out " input = [input[blen-p+1:blen-1], signal[lower:upper]]").

One thing that i notice is that you are concatenating your new array each
loop.
That may a bit wasteful in memory, although I usually do that with no
problems.

What are the values you use (k, p blen, etc)? Could you include the initial
values that you have just before the loop?
I can run the same code (on a fake signal) and see if I reproduce your
problems.

Cheers,
bob