Subject: IDL and Macs. Speed is not only about squared roots
Posted by jgc on Fri, 14 Jul 2006 07:17:13 GMT
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Dear all,

I tried the tests decribed in topic
 http://groups.google.com/group/comp.lang.idl-pvwave/browse_t
hread/thread/da3a8dd9a11276d3/87f9e46339684e43#87f9e46339684 e43
 in a rather unfair fashion (IDL 6.0 on windows PC 1.4 GHZ against IDL
6.3 Mac OS X 2.16 GHz Intel duo) and results were, as expected:
0.02 against 0.88 to the advantage of the Mac (for
a=randomu(sd,100L*10000l) as the pc didn't have enough memory.

However there is more in life than squared roots, so I was dissapointed
to see that a complex program, involving large array manipulation,
input and output, and loops reduced to a minimum, took almost double
the time in the Mac than in the windows PC. This is a energy balance
model for snow ablation over a glacier in the Alps
(http://www.arolla.ethz.ch/snowdem.html).

One summer simulation took 22 minutes on IDL 6.0 in the windows PC 1.4
GHz and 42 minutes on the Mac Intel 2.16 GHz with IDL 6.2. Almost
double in a much more powerful computer! IDL 6.3 seems slightly
better but still slower (I'm waiting for the full license to test it).

I did additional texts such as repeatig more complex processes (my
shading algorithm, http://www.ittvis.com/codebank/search.asp?FID=141).
Here the mac outperforms the pc. Thus, obviously there must be just a
few inefficient processess for the Mac, which slow down the wole thing.

I wonder if anybody has identified which are these processes, so that
we can optimize the code by avoiding them as much as possible.

Thanks,

Javier