Subject: Re: Plea for IDL 2000 (was: a plea for more reliable mathematical routines)
Posted by ushomirs on Sat, 18 Sep 1999 07:00:00 GMT
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well, i knew i'd be in for some flames when i wrote this, so heck,
bring 'em on.

but seriously, you do NOT need to convince me that IDL it is useful.
I've been using it for ..pause to count.. well, since 1991. not
continuously of course, there have been periods of order months when i
just haven't needed it. i've used it for processing satellite data
(GOES, YOHKOH, DMSP), but most recently for crunching though the output
of my simulations and making publication-quality plots.

and yes, i instructed my advisor to buy idl, not the other way around.
in fact, my department has 50 licenses now.

it's just that the number of hoops one has to jump through to get a
decent (publication-quality) plot out of idl is tremendous. for
example, you can say device,font_size=12 when in postscript mode to
request 12pt fonts. but if you stack 2 plots on a page with !p.multi,
you won't get 12pt fonts, but something much smaller? so you have to go
back and screw around with charsize keywords. i can name a gazzilion
things like that. in fact, there's not a single element of the plot that
i don't end up doing by hand (including placing axis captions, etc).
what's the point in having a PLOT command if i basically have to do
everything by hand?? i don't have time for that...

as far as developing idl as a "hack". i'm sure none of the original
code Stern wrote at LASP is in idl. that would be property of University
of Colorado, he wouldn't be able to sell that commercially. Just like
netscape people had to rewrite netscape from scratch, without using any
of the mosaic code. So i don't see how unsound programming practices
that would have been acceptable in a prototype could pass in a real,
shipping product. a product that costs many times more than microsoft
office. and boy, does Microsoft get major flak for bugs in their stuff!

the story is that in astronomy (my field) idl has become one of the
de-facto standards (god, it's a lesser evil than IRAF). there's tons of
data reduction software written in IDL. stuff that has been tested and
works. so many people's sense is that, while idl has many shortcomings,
using something different to replace it would take a while to get up to
speed. now, since we don't program for programming sense, but only to
get scientific results, it's easier to deal with all the quirks than
start fresh.

SO while my original complaint about bad documentation for LSODE started
this big flame war, nobody even bothered to take on my second question,

how the heck do i call an IDL function from an external (linkimage or dlm) module??

greg