Subject: Re: Displaying 3-D vector fields
Posted by Mark Hadfield on Thu, 14 Nov 2002 23:47:06 GMT
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"Rick Towler" <rtowler@u.washington.edu> wrote in message news:ar15buuku1@nntp6.u.washington.edu...

> Now you speak up!

My apologies. I did submit a message to this thread earlier but somehow it never showed up.

> I can easily create 20k individual vector objects so I don't know
> what you have run into in the past. This approach will cost him an
> extra 8MB or so with the IDLgrModel overhead but what the heck,
> memory is cheap!

OK, it's not memory that kills you when you have a large number of objects, it's redraw speed. (Another apology, this time for looseness.) I based this assertion on experience with scatter plots, discussed on the group several times in the past: when you're dealing with > 1000 geometric entities, combining them into one object gives much faster redraws than having a separate object for each one. I thought I should check that this principle out for the current case, so I just compared a barb plot with 1000 line segments in one IDlgrPolyline vs a barb plot with a 1000 IDLgrPolylines. Sure enough, the single-object version is redrawn very snappily, the multi-object version takes 0.5 s or so per redraw. So, on my machine at least, 18 K objects would be pretty slow.

> True, but dealing with the vector head using this approach is an,
> um, headache.

Oh right, I hadn't thought about this much. I have given up on trying to draw heads on my barbs (can't be bothered with all the geometry) but my MGHgrBarbPlot object can draw a symbol at the base of each barb. I find I prefer the look of this anyway.

>> Unfortunately my library is off the air at the moment. (I really
>> must do something about this.) > > Please do!

Yes, I really really will. I promise.

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