Subject: Re: Your experience with other scientific languages?
Posted by Andy Sayer on Mon, 11 Nov 2013 17:44:22 GMT

For some context, I use IDL as my main programming language for Earth science research (satellite and ground-based remote sensing).

I have used Python a bit. Some friends (in the same field of research and so with the same basic needs) swear by it, and are able to produce maps and plots which look as nice as those I make in IDL.

One of the main reasons I use IDL is that's what a lot of other people were using, and what our department's code was in when I started my doctorate (well it was mostly IDL but also a bit of Python and FORTRAN). We didn't really have a choice and I was a novice programmer so didn't want to strike out with a different language when everyone else was using IDL.

When I moved to my current job it was also an IDL-rich group, so it was again easier to migrate some of my own old code, and also deal with inherited code. Python was present at both institutions (as was Matlab, incidentally, which I've never used), but it was always second fiddle to IDL.

So for me the argument for sticking with IDL through the years has been ease of dealing with inherited code and not having to build up personal libraries from the ground. I also prefer the way written IDL looks to Python (I find the indenting and lack of 'closure' of indents in Python jarring to read), although expect I could train myself not to be bothered by it.

I guess if I were moving to a new job where they didn't use IDL it may be tempting to start again with Python... it would solve license issues (all institutions I've been at with IDL have had limited numbers of licenses because of the cost, which can lead to a lot of frustrations having to walk around buildings and figure out who really needs it that day). In terms of Python's ease of installation, I'm told that while the language is free there's some package you can pay for which is an 'easy install' of most packages you'd use.

From time to time I think of taking the plunge with Python but without a 'push' to do it, so far I haven't. I do think IDL is fairly easy, which is one attraction, and am happy with it (most of the time, see my previous threads regarding map_image, map_continents and so forth and what appears to be a lack of interest from Exelis to fix these things).

Andy