
Subject: Notable Coyote Program Updates

Posted by [David Fanning](#) on Tue, 23 Nov 2010 15:41:20 GMT

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Folks,

As some of you have probably realized, I'm in the process of completely refurbishing my Coyote Library. This is what happens when you start writing a book. Explaining how something works gives you a MUCH better idea of how something **ought** to work!

The work is on-going and probably won't be completely finished until early next year. But I wanted to give you a heads-up on a couple of notable changes today.

I have made the TVScale command completely obsolete by moving all the unique TVScale functionality over to TVImage. This means you can scale images on the fly with TVImage using the "normal" scaling keywords: MinValue, MaxValue, Bottom, Top, and NColors.

I particularly like the NCOLORS and BOTTOM keywords together, because you can immediately scale image data into, say, 12 colors like this:

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IDL> LoadCT, 33, NColors=12, Bottom=1
IDL> TVImage, image, NColors=12, Bottom=1
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Pretty neat. :-)

There is also a conflict in IDL 8 with the old IDL ARROW program, which is still in the IDL lib directory. This conflicts with the ARROW function, which is in the lib/graphics directory. If you want to use the **old** ARROW program, you need to name it something else. Since I was renaming it, and since I wanted to add additional functionality to it, including making it machine and color mode independent, I just decided to do it right, so I've named this FSC_Arrow and put it in the Coyote Library.

Finally, I have replaced ZPLOT and ZIMAGE, which provide interactive zooming into line plots and images, respectively, with FSC_ZPlot and FSC_ZImage. These new programs are device and color independent, and FSC_ZImage now works with both 2D and True-Color images. Plus, it works correctly with images that are very, very

large and wouldn't fit on your display.

I've made other small changes to the new FSC_*** series of programs to make sure color variables don't change data type as a result of program manipulation.

I appreciate the feedback from people who are using these programs. They are getting pretty darn good, if I do say so myself. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Notable Coyote Program Updates

Posted by [Paul Van Delst\[1\]](#) on Tue, 23 Nov 2010 18:43:36 GMT

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Hello David,

Are you generating new tags of the updates in your repository as you complete them? Or are you waiting for the early next year date?

cheers,

paulv

David Fanning wrote:

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> David
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Subject: Re: Notable Coyote Program Updates

Posted by [Paul Van Delst\[1\]](#) on Tue, 23 Nov 2010 18:44:38 GMT

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Oh, and lest I sound ungrateful, thanks very much for the code updates. :o)

cheers,

paulv

Paul van Delst wrote:

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Subject: Re: Notable Coyote Program Updates
Posted by [David Fanning](#) on Tue, 23 Nov 2010 18:52:46 GMT
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Paul van Delst writes:

> Are you generating new tags of the updates in your repository as you complete them? Or are
> you waiting for the early
> next year date?

I think I will tag a "release" to coincide with the
release of the book. These are in some degree of flux
at the moment, as I use them extensively and discover

new features I would like them to have.

I'm no good at saving things up for the Big Surprise, however, so I'm making these programs available in the repository and on my web page as they become reasonably "stable." :-)

Plus, the more eyeballs we have looking these programs over, the better they get. My eyesight appears to be waining. :-(

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Notable Coyote Program Updates

Posted by [David Fanning](#) on Tue, 23 Nov 2010 18:58:47 GMT

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Paul van Delst writes:

> Oh, and lest I sound ungrateful, thanks very much for the code updates. :o)

You did appear to be somewhat ungrateful. I was afraid you had abandoned me for the dark side and the New Graphics. :-)

Cheers,

David

P.S. Lest *I* appear ungrateful, I actually think the New Graphics are a great idea. I just can't use them because I can't seem to keep IDL 8 running very well. I do note that since I installed IDL 8, the IDL 7 Help system works perfectly! That's almost reason enough to upgrade to IDL 8, right there. ;-)

--

David Fanning, Ph.D.
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Subject: Re: Notable Coyote Program Updates
Posted by [Jianbao](#) on Wed, 24 Nov 2010 18:59:47 GMT
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On Nov 23, 8:41 am, David Fanning <n...@dfanning.com> wrote:

> Folks,
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As a person who has been using the Coyote library for years, I wanna express my sincere gratefulness to you, Dr. Fanning, for all your hard work. I am sure it will help people like me a lot. Happy thanksgiving!

Subject: Re: Notable Coyote Program Updates
Posted by [JMZawodny](#) on Mon, 29 Nov 2010 20:08:31 GMT
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... and I suppose combining the two with something like

IDL> TVImage, image, NColors=12, Bottom=1, Color_Table=33

would be asking for too much? I'm sure there is a good reason not to do this but, it is just an optional keyword after all.

Thanks,
Joe

On Nov 23, 10:41 am, David Fanning <n...@dfanning.com> wrote:

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Subject: Re: Notable Coyote Program Updates
Posted by [David Fanning](#) on Mon, 29 Nov 2010 21:12:20 GMT
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Joe Zawodny writes:

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> do this but, it is just an optional keyword after all.

It is not impossible to do, certainly. ScaleImage
in the Catalyst Library works like this, but there
an image is associated with colors and a coordinate
system, so it makes more sense to me.

I guess it is a philosophical thing. I believe in simple
tools for simple, everyday tasks. When I start thinking
for you, I become more like Microsoft Word than I really
care to be. TVImage doesn't really "know" about the image,
the way ScaleImage "knows" about the image. Because it is,
at heart a glorified TV command, TVIMAGE simply blasts pixels
onto the display.

I'd prefer to let you have some idea what you are doing
with color tables and let TVImage just feel like a smooth
plane in your hand. :-)

Cheers,

David

P.S. And, anyway, it is not just a COLOR_TABLE keyword.
It would have to be BREWER and REVERSE, too, to set up
colors the way I would like to set them up. :-)

--

David Fanning, Ph.D.

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