Subject: Re: call ENVI menu routines Posted by David Fanning on Wed, 22 Sep 2010 16:38:26 GMT

View Forum Message <> Reply to Message

chris writes:

- > is it possible to call ENVI routines from IDL directly, e.g. Basic
- > Tools/Stretch Data, so that the specific menu will be opened?

I don't know. I doubt it.

But if you just want to stretch data, XStretch works pretty well. It has all of the stretches ENVI has. (Or at least it did when I wrote it.)

http://www.dfanning.com/ip_tips/xstretch.html

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: call ENVI menu routines
Posted by Mort Canty on Wed, 22 Sep 2010 18:17:16 GMT
View Forum Message <> Reply to Message

Am 22.09.2010 18:28, schrieb chris:

- > Hi,
- > is it possible to call ENVI routines from IDL directly, e.g. Basic
- > Tools/Stretch Data, so that the specific menu will be opened?

>

> Thanks in advance

>

> CR

Well, you can certainly access just about every ENVI menu routine from IDL by calling the corresponding "DOIT", e.g.,

ENVI_DOIT, STRETCH_DOIT, FID=FID, ...

but you have to supply everything that you would have otherwise entered into the menu as keywords.

Mort

Subject: Re: call ENVI menu routines
Posted by rogass on Wed, 22 Sep 2010 18:39:04 GMT
View Forum Message <> Reply to Message

```
On 22 Sep., 20:17, Mort Canty <m.ca...@fz-juelich.de> wrote:
> Am 22.09.2010 18:28, schrieb chris:
>
>> Hi,
>> is it possible to call ENVI routines from IDL directly, e.g. Basic
>> Tools/Stretch Data, so that the specific menu will be opened?
>> Thanks in advance
>
>> CR
>
> Well, you can certainly access just about every ENVI menu routine from
 IDL by calling the corresponding "DOIT", e.g.,
>
 ENVI DOIT, STRETCH DOIT, FID=FID, ...
> but you have to supply everything that you would have otherwise entered
> into the menu as keywords.
> Mort
```

Dear Mort, dear David,

i know how to use ENVI routines from IDL, but some routines have limitations. The same routines are not limited if you would call them from the ENVI menu. The stretching routine was only an example. Any other ideas?

Best regards

CR

Subject: Re: call ENVI menu routines
Posted by David Fanning on Wed, 22 Sep 2010 18:45:18 GMT
View Forum Message <> Reply to Message

chris writes:

- > i know how to use ENVI routines from IDL, but some routines have
- > limitations. The same routines are not limited if you would call them
- > from the ENVI menu. The stretching routine was only an example. Any
- > other ideas?

The real problem is, as Mort and I have reported before, ENVI doesn't use its own API. If they had to eat their own cooking, things would probably improve. :-)

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: call ENVI menu routines
Posted by David Fanning on Wed, 22 Sep 2010 18:55:39 GMT
View Forum Message <> Reply to Message

David Fanning writes:

- > The real problem is, as Mort and I have reported before,
- > ENVI doesn't use its own API. If they had to eat their
- > own cooking, things would probably improve. :-)

Having said that, I watched an on-line seminar yesterday on using ENVI with the new WorldView2 satellite data from DigitalGlobe and I was *extremely* impressed with the latest version of ENVI (which I have never used). In the right hands (not mine, apparently), that is an impressive piece of software. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: call ENVI menu routines
Posted by Maxwell Peck on Wed, 22 Sep 2010 21:44:52 GMT
View Forum Message <> Reply to Message

```
On Sep 23, 4:39 am, chris <rog...@googlemail.com> wrote:
> On 22 Sep., 20:17, Mort Canty <m.ca...@fz-juelich.de> wrote:
>
>
>
>> Am 22.09.2010 18:28, schrieb chris:
>>> Hi.
>>> is it possible to call ENVI routines from IDL directly, e.g. Basic
>>> Tools/Stretch Data, so that the specific menu will be opened?
>
>>> Thanks in advance
>>> CR
>> Well, you can certainly access just about every ENVI menu routine from
>> IDL by calling the corresponding "DOIT", e.g.,
>> ENVI_DOIT, STRETCH_DOIT, FID=FID, ...
>
>> but you have to supply everything that you would have otherwise entered
>> into the menu as keywords.
>> Mort
> Dear Mort, dear David,
> i know how to use ENVI routines from IDL, but some routines have
> limitations. The same routines are not limited if you would call them
> from the ENVI menu. The stretching routine was only an example. Any
> other ideas?
> Best regards
> CR
Chris,
```

Which routines in particular? ENVI I have found is a lot better in that regard than it has been in the past.

FYI sometimes you need to call a few routines to make up for the

functionality you see in the ENVI GUI, e.g. BACKGROUND_STATS_DOIT before the MTMF_DOIT whereas in the GUI you do this together.

David,

Not to sound like a marketing rep for ITT but I do sometimes think ENVI is often overlooked by the remote sensing IDL community in general. Yes it is more expensive but how much is ones time worth? A lot of the pain in the neck tasks you need to code in IDL (map projections, file i/o etc) are one liners in ENVI and can be coded generically for use with any dataset quickly. Tiling and tiled routines also let you use massive images efficiently without having to stuff around. I do tend to find its quicker to code something quickly that you can be reasonable confident is correct.

Max

Subject: Re: call ENVI menu routines
Posted by David Fanning on Wed, 22 Sep 2010 22:07:03 GMT
View Forum Message <> Reply to Message

Maxwell Peck writes:

> David.

>

- > Not to sound like a marketing rep for ITT but I do sometimes think
- > ENVI is often overlooked by the remote sensing IDL community in
- > general. Yes it is more expensive but how much is ones time worth? A
- > lot of the pain in the neck tasks you need to code in IDL (map
- > projections, file i/o etc) are one liners in ENVI and can be coded
- > generically for use with any dataset quickly.

I suppose, although I never found it particularly intuitive to use. And I found it extremely difficult to learn to use the functionality on my own without someone to show me the ropes. And the one thing I needed to do DAILY (put continental outlines and grids on map projected images) seemed to take days and weeks in ENVI. Well, maybe not days and weeks, but putting continental outlines on an image of the sort we are talking about today, would take on the order of minutes in ENVI. Believe me, you never wanted to resize the image!

(We showed this to an ENVI rep who was visiting, and he didn't know anything about it. Apparently, putting continental outlines on images is not something that is done by the remote sensing community. Go figure.)

- > Tiling and tiled
- > routines also let you use massive images efficiently without having to
- > stuff around.

This is *certainly* true! Why aren't these routines available in IDL? As a marketing tool verses MatLab, it would be invaluable.

- > I do tend to find its quicker to code something quickly
- > that you can be reasonable confident is correct.

Probably why I stick with IDL and its direct graphics. ;-)

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: call ENVI menu routines
Posted by Maxwell Peck on Thu, 23 Sep 2010 08:23:13 GMT
View Forum Message <> Reply to Message

On Sep 23, 8:07 am, David Fanning <n...@dfanning.com> wrote:

- > Maxwell Peck writes:
- >> David,

>

- >> Not to sound like a marketing rep for ITT but I do sometimes think
- >> ENVI is often overlooked by the remote sensing IDL community in
- >> general. Yes it is more expensive but how much is ones time worth? A
- >> lot of the pain in the neck tasks you need to code in IDL (map
- >> projections, file i/o etc) are one liners in ENVI and can be coded
- >> generically for use with any dataset quickly.

>

- > I suppose, although I never found it particularly intuitive
- > to use. And I found it extremely difficult to learn to use
- > the functionality on my own without someone to show me the
- > ropes. And the one thing I needed to do DAILY (put continental
- > outlines and grids on map projected images) seemed to take
- > days and weeks in ENVI. Well, maybe not days and weeks, but
- > putting continental outlines on an image of the sort we are
- > talking about today, would take on the order of minutes in

> ENVI. Believe me, you never wanted to resize the image! > > (We showed this to an ENVI rep who was visiting, and he > didn't know anything about it. Apparently, putting continental > outlines on images is not something that is done by the remote > sensing community. Go figure.) > >> Tiling and tiled >> routines also let you use massive images efficiently without having to >> stuff around. > This is *certainly* true! Why aren't these routines available > in IDL? As a marketing tool verses MatLab, it would be > invaluable. >> I do tend to find its quicker to code something quickly >> that you can be reasonable confident is correct. > Probably why I stick with IDL and its direct graphics. ;-) > > Cheers, > David > David Fanning, Ph.D. > Fanning Software Consulting, Inc.

David.

I'm sure you've covered this before but were the shapefiles you were overlaying in the same projection as your image? I only mention this because I often overlay large shapefiles on very big images and while it can be a little bit slow sometimes i've never found it to be bad.

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

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

Max

Subject: Re: call ENVI menu routines
Posted by David Fanning on Thu, 23 Sep 2010 12:35:28 GMT
View Forum Message <> Reply to Message

Maxwell Peck writes:

- > I'm sure you've covered this before but were the shapefiles you were
- > overlaying in the same projection as your image? I only mention this

- > because I often overlay large shapefiles on very big images and while
- > it can be a little bit slow sometimes i've never found it to be bad.

No, probably not. It was a while ago, but I think I converted the IDL continental database to a vector file, and I believe I tried the GSHHS shapefiles. Neither are in a particular map projection. Everything I tried was exceedingly slow. No doubt there is a faster way, but I never discovered it.

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.")