
Subject: ENVI Vector File with IDL

Posted by [rafaloos](#) on Thu, 13 Apr 2006 18:33:55 GMT

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I am trying to create an Envi Vector File (EVF) with IDL.
ENVI has a function for doing that and also gives an example on how to create a PRO file.

Here is a small piece of the code:

```
pro create_new_evf_file
;
; Create a Geographic projection
; with the default datum and units.
;
proj = envi_proj_create(/geographic)
;
; Define a polyline vector in Lat/Lon coordinates
;
polyline = [ $
    -106.904,    41.5887, $
    -106.821,    42.2302, $
    -106.013,    42.2183, $
    ; .....
; Initialize the new EVF file
;
evf_ptr = envi_evf_define_init('sample.evf', $
    projection=proj, data_type=4, $
    layer_name='Sample EVF File')
;.....
```

How can I call that ENVI_PROJ_CREATE function with IDL?

If I try to run the code as it is, I receive this message from IDL:

```
proj = envi_proj_create(/geographic)
                        ^
```

% Syntax error.

Thanks

Subject: Re: ENVI Vector File with IDL

Posted by [David Streutker](#) on Fri, 14 Apr 2006 15:05:26 GMT

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Are you saying that ENVI_PROJ_CREATE doesn't work for you because you don't have an ENVI license? Because if that's the case, then none of

the ENVI_EVF_* routines are going to be available to you either.

-David

Subject: Re: ENVI Vector File with IDL
Posted by [rafaloos](#) on Fri, 14 Apr 2006 17:27:29 GMT
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Hi, David...

I have an ENVI license. That is not the problem. The problem is that the way this routines are being called, IDL complains that there are some syntax errors, e.g the equal signs (projection=proj) :

```
evf_ptr = envi_evf_define_init('sample.evf', $  
    projection=proj, data_type=4, $  
    layer_name='Sample EVF File')
```

I was wondering what I should do to make this PRO example to work with IDL.

Thanks

Subject: Re: ENVI Vector File with IDL
Posted by [David Streutker](#) on Fri, 14 Apr 2006 18:03:30 GMT
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Ah, I understand.

I don't see anything wrong with your projection calls. However, I believe your polyline needs to be a [2,n] array, not a [1,n] as is shown in your example.

```
polyline = [ $  
    [-106.904,    41.5887], $  
    [-106.821,    42.2302], $  
    [-106.013,    42.2183], $  
    .....
```

With this change, it works for me.

-David

Subject: Re: ENVI Vector File with IDL

Posted by [Michael Galloy](#) on Fri, 14 Apr 2006 19:19:10 GMT

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rafaloos@gmail.com wrote:

> I was wondering what I should do to make this PRO example to work with
> IDL.

And just to be sure, you've initializing ENVI in batch mode before this call?

-Mike
michaelgalloy.com

Subject: Re: ENVI Vector File with IDL

Posted by [rafaloos](#) on Fri, 14 Apr 2006 20:04:12 GMT

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Hi Michael ...

You mean this lines ?

```
envi, /restore_base_save_files  
envi_batch_init, log_file='~/Desktop/batch.txt'
```

I did that ... but still .. IDL complains ...

If I run the routine through the ENVI prompt it works ... but it doesn't work if I only use IDL without starting the ENVI software.

Thanks

Subject: Re: ENVI Vector File with IDL

Posted by [AEO](#) on Fri, 14 Apr 2006 20:22:05 GMT

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Try putting "compile_opt idl2" at the top of your program :

```
PRO test  
compile_opt idl2  
proj = envi_proj_create(/geographic)  
END
```

ENVI_PROJ_CREATE is not a recognized internal IDL function, so when you go to compile it treats it as a variable that is being subscripted, so the "/" character causes a syntax error.

- AEO

Subject: Re: ENVI Vector File with IDL

Posted by [Michael Galloy](#) on Fri, 14 Apr 2006 20:30:51 GMT

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rafaloos@gmail.com wrote:

```
> Hi Michael ...
> You mean this lines ?
>
>     envi, /restore_base_save_files
>     envi_batch_init, log_file='~/Desktop/batch.txt'
>
> I did that ... but still .. IDL complains ...
> If I run the routine through the ENVI prompt it works ... but it
> doesn't work if I only use IDL without starting the ENVI software.
>
> Thanks
>
```

Yes, when I do that, everything seems to work (see below). Is there anything in your log file?

```
IDL> envi, /restore_base_save_files
% Restored file: ENVI.
% Restored file: ENVI_M01.
% Restored file: ENVI_M02.
% Restored file: ENVI_M03.
% Restored file: ENVI_M04.
% Restored file: ENVI_M05.
% Restored file: ENVI_M06.
% Restored file: ENVI_M07.
% Restored file: ENVI_M08.
% Restored file: ENVI_D01.
% Restored file: ENVI_D02.
% Restored file: ENVI_D03.
% Restored file: ENVI_CW.
% Restored file: ENVI_IDL.
% Restored file: ENVI_IOU.
IDL> envi_batch_init, log_file='~/Desktop/batch.txt'
IDL> proj = envi_proj_create(/geographic)
IDL> help, proj
PROJ      STRUCT    =-> ENVI_PROJ_STRUCT Array[1]
IDL> help, proj, /structure
** Structure ENVI_PROJ_STRUCT, 6 tags, length=156, data length=150:
  NAME      STRING   'Geographic Lat/Lon'
  TYPE      INT       1
  PARAMS    DOUBLE   Array[15]
  UNITS     INT       6
  DATUM     STRING   'WGS-84'
  USER_DEFINED INT     0
```

Mike

--

www.michaelgalloy.com

Subject: Re: ENVI Vector File with IDL

Posted by [Michael Galloy](#) on Fri, 14 Apr 2006 20:41:22 GMT

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AEO wrote:

> Try putting "compile_opt idl2" at the top of your program :

Ah yes, of course. I should have a "compile_opt strictarr" key to save me from repetitive stress injuries caused by typing it so many times.

Mike

--

www.michaelgalloy.com

Subject: Re: ENVI Vector File with IDL

Posted by [rafaloos](#) on Fri, 14 Apr 2006 20:46:48 GMT

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..the compile_opt idl2 solved the problem ...

Thanks AEO and everybody that replied my message.

Subject: Re: ENVI Vector File with IDL

Posted by [rafaloos](#) on Fri, 14 Apr 2006 20:47:01 GMT

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..the compile_opt idl2 solved the problem ...

Thanks AEO and everybody that replied my message.
