Subject: Help with Idl+Envi

Posted by MaxA on Fri, 16 Jul 2010 08:42:11 GMT

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Hi guys!

I need some help in image processing with IDL and Envi.

I have an image corresponding to the local Moran Index, computed through envi basic tools.

Its values range from -0.000189 and 0.008413.

When I open this image in envi, it is displayed as a greyscale image (8bit for each channel rgb).

What I'd like to do is to write an idl procedure that does the same mapping from floating values to rgb 8 bit.

I'm a bit stucked with that and any help would be precious!

Thanks everybody!

Max

Subject: Re: help with idl

Posted by Helder Marchetto on Thu, 07 Feb 2013 14:26:46 GMT

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On Thursday, February 7, 2013 3:13:36 PM UTC+1, fd_...@mail.com wrote:

- > Does anyone know how to create a Toeplitz matrix in idl??
- > >
- > Best Wishes
- >
- > Mar

Well, I'm not sure that this is what you are looking for and I don't think that this is the the "IDL" way, however it does the job:

```
IDL> n = 5

IDL> a = make_array(n,n)

IDL> OneLine = findgen(2*n)

IDL> FOR I=0,n-1 DO a[*,I] = (shift(OneLine,I))[0:4]

IDL> print, a

0.000000 1.00000 2.00000 3.00000 4.00000
```

```
8.00000
          0.000000
                      1.00000
                                2.00000
                                           3.00000
7.00000
          8.00000
                    0.000000
                                1.00000
                                           2.00000
                               0.000000
6.00000
          7.00000
                     00000.8
                                           1.00000
5.00000
          6.00000
                     7.00000
                                8.00000
                                          0.000000
```

Hope it helps.

Subject: Re: help with idl

Cheers,

```
h
```

```
Posted by Helder Marchetto on Thu, 07 Feb 2013 14:28:45 GMT
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On Thursday, February 7, 2013 3:26:46 PM UTC+1, Helder wrote:
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>
> IDL> a = make array(n,n)
>
 IDL> OneLine = findgen(2*n)
>
 IDL> FOR I=0,n-1 DO a[*,I] = (shift(OneLine,I))[0:4]
>
> IDL> print, a
```

```
>
     0.000000
>
                  1.00000
                             2.00000
                                         3.00000
                                                     4.00000
>
      8.00000
                 0.000000
                             1.00000
                                         2.00000
                                                     3.00000
>
>
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      7.00000
                 8.00000
                            0.000000
                                         1.00000
                                                     2.00000
>
      6.00000
                 7.00000
                             8.00000
                                        0.000000
                                                     1.00000
>
>
      5.00000
                 6.00000
                             7.00000
                                        8.00000
                                                   0.000000
>
>
>
>
  Hope it helps.
>
>
>
> Cheers,
> h
Oh, yeah, to define the general elements you should edit the definition of OneLine. For instance
you could try with:
OneLine = [0.0,1,2,3,4,8,7,6,5]
Cheers,
Η
```

```
Subject: Re: help with idl
Posted by Brian Daniel on Thu, 07 Feb 2013 18:26:10 GMT
```

```
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On Thursday, February 7, 2013 9:13:36 AM UTC-5, fd_...@mail.com wrote:
> Does anyone know how to create a Toeplitz matrix in idl??
>
>
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> Mar

DIAG_MATRIX can build this easily.
```

```
N=8
OneLine = Indgen(N)+1
a = make_array(N,N)
FOR ii=-N+1, N-1 DO a += Diag_Matrix(Replicate(OneLine[ii],abs(N-abs(ii))),ii)
```

The abs() business was to allow for lower triangular portion to be filled. I usually use upper triangular matrices.

-B

Subject: Re: help with idl Posted by Brian Daniel on Thu, 07 Feb 2013 18:26:35 GMT View Forum Message <> Reply to Message

On Thursday, February 7, 2013 9:13:36 AM UTC-5, fd_...@mail.com wrote:

- > Does anyone know how to create a Toeplitz matrix in idl??
- >
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And the Make_Array call is not needed...