
Subject: Re: Newbie to satellite data and IDL
Posted by [David Fanning](#) on Wed, 15 Feb 2006 18:04:09 GMT
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alex922@gmail.com writes:

> I am a software engineer who has been thrown into the world of
> oceanographic satellite data and IDL(no experience). I was wondering
> if anyone knew of any 'tutorial' websites that teaches how to create
> images of sea surface temperature data(AVHRR) in IDL? Or any other
> good places to start?

Here is a recent tutorial on displaying TOMS aerosol data
on a map:

http://www.dfanning.com/graphics_tips/toms_tutorial.html

If you poke around this site a little bit, you might find
one or two other little things of interest. :-)

<http://www.dfanning.com/documents/tips.html>

Cheers,

David

--

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

Subject: Re: Newbie to satellite data and IDL
Posted by alex922@gmail.com on Wed, 15 Feb 2006 19:48:48 GMT
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Wow! Thanks David! I just checked out your site, and it seems like a
great place for me to start.

THANK YOU!
Alex

Subject: Re: Newbie to satellite data and IDL
Posted by [David Fanning](#) on Wed, 15 Feb 2006 19:58:12 GMT
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Alex writes:

> Wow! Thanks David! I just checked out your site, and it seems like a
> great place for me to start.

Yes, and a good book will also save you weeks and months of effort. ;-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: Newbie to satellite data and IDL

Posted by peter.albert@gmx.de on Thu, 16 Feb 2006 07:49:16 GMT

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Hi Alex,

if your AVHRR data happens to come in HDF5, you might want to try our little READ_HDF() routine found at <http://wew.met.fu-berlin.de/idl/>. It can possibly help you understanding how to deal with HDF files in IDL. Furthermore, if your data is still in satellite projection (or any other different from plain lat/lon), you need some routines for properly plotting the data onto a map. The starting point here would be Liam Gumley's IMAGEMAP routine. On the above website you'll find a modified (object-oriented) version, MAP_IMAGE__DEFINE. Above all, it adds the option to subsequently add multiple overpasses into one plot.

Assuming you had a AVHRR HDF file with three datasets, "lon", "lat" and "sst", the code fragment for creating the first image would read like

```
lon = read_hdf(avhrr_filename, "/lon")
lat = read_hdf(avhrr_filename, "/lat")
sst = read_hdf(avhrr_filename, "/sst")
m = obj_new("map_image", sst, lat, lon, /rainbow)
obj_destroy, m
```

Cheers,

Peter
