

Session 6 - Tuesday am - 19th September

Introduction

In this session we will look at how to remap the SeaWiFS data produced in earlier sessions. If one wishes to study a set of data through time, or to perform averaging, it is often easier to remap all the data to a standard grid.

bl2map

We will be using the SeaDAS routine **bl2map** to remap the L2 data to a standard map projection. We could have used **bl1map** and remapped the L1A data prior to L2 processing.

bl2map - GUI interface

- Have a look at the **bl2map** help page.
- Select **Process -> SeaWiFS -> bl2map** under the **SeaDAS Main Menu**.

- Select an input file name.
 - Enter an output file name.
 - Select a **Mercator** projection.
 - Enter a latitude and longitude range.
 - Enter a suitable **xsize** and **ysize**.
 - Select a few output products.
 - Select **Run**.
- View the unmapped L2 file and the remapped L2 file. To view the mapped L2 file select **Display** -> **seadis** -> **Load** -> **SeaDAS Mapped**

bl2map - command line

The **bl2map** function may also be run from the command line.

- Read the **bl2map** help page information on command line processing.
- Read the help page on running SeaDAS. Note the use of command files associated with running SeaDAS functions from the command line.

Some functions in SeaDAS do not require IDL routines. The **l1agen** and **msl12** are two such functions. Functions involving any mapping or renavigation generally do require IDL, and are therefore not able to be run from the UNIX/LINUX prompt. If you have an IDL development licence, you have an IDL prompt and are able to run these functions within IDL. Another way to run these functions is to submit them via SeaDAS by entering the command line procedure in a command file, then passing this command file to SeaDAS.

The method of running **bl2map** from the IDL command line is

-> bl2map, ifile, ofile

To run this from the LINUX prompt, the above command line is placed in a text file, in this case called **bl2map.cmd**, then passed to SeaDAS at the LINUX prompt.

-> seadas -em -b bl2map.cmd

Note, if you have an IDL development licence you do not need the **-em**.

Here is a sample command file;

```
bl2map, '/home/peter/sample.L2', '/data1/seawifs/L2/sample_map.L2', ['chlor_a',  
'K_490'], xsize=400, ysize=400, limit=[-31, 114, -28, 116], /merc
```

Exercise 5:

Create a command file to remap a small section of the Black Sea L2 data. Specify 4 products, choose appropriate xsize and ysize values to create pixels at approximately full resolution. Specify Mercator for the map projection. When you have tested the command file and made sure it is working, show it to us.

Batch processing

I have created a csh script to remap L2 files using the embedded IDL licence in SeaDAS. This script is called **l2studybatch_em**.

- Type **./l2studybatch_em** to view the usage notes.
- Each group will have to agree on the location and size of the study

region to be remapped. The script contains five sample study regions located on the west coast of Australia. You will need to edit the script to specify the Black Sea study region.

- Remap your L2 files.