

## 0. Collect necessary data files

e.g. *L2\_LAC.x.hdf*; *L2\_LAC\_SST.x.hdf* (subset)  
*L2\_LAC*; *L2\_LAC\_SST* (full granule)

- Download from <http://oceancolor.gsfc.nasa.gov> or get copies; a few samples in *\Images\MODIS-Aqua\L2*, sample standard maps in *\Images\MODIS-Aqua\L2\_processing*
- Make a folder **C:\sat\YourArea\2008\A2008**, copy Aqua L2 files to that folder

See exercises in the *Course\2* folder:

- *2\_Exercises\_with\_L2\_satellite\_data.pdf*
- *2\_Exercises\_with\_L2\_satellite\_data\_Your\_area.pdf*
- *Exercises\_Merging\_L2\_Ch1\_and\_SST.pdf*

## 0. Collect necessary data files, e.g. Chl or SST

- Download from <http://oceancolor.gsfc.nasa.gov> or get copies
- Make folder **C:\sat\YourArea\2008\A2008**
- Uncompress with *bzip2 -d \*.bz2* command
  - A2007156062000.L2\_LAC.bz2
  - A2007158060500.L2\_LAC.bz2
  - A2007159065000.L2\_LAC.bz2
  - A2007160055500.L2\_LAC.bz2
- Compress with *wam\_compress\_hdf* command, e.g. *wam\_compress\_hdf \*LAC\** or *wam\_compress\_hdf \*.hdf*

1. Create time series of images with **WIM**
2. Create time series of images with **wam\_series**
3. Create time series of images with **WAM commands**

# 1. Create time series of images with WIM

- Load *chlor\_a*, convert to *Log-Chl* scaling
- Make a standard image projection
- Remap to your standard projection

To create a standard projection you can create a New image with *Linear* projection, put coastlines (with pixel value 1), fill land with pixel value 255 (white), create color scale, make a standard overlay with color scale

Remember to set the scaling and stretch the colors of the overlay image, i.e. scaling to *Log-Chl*, color range to 48-200 (= 0.05 to 10 mg Chl-a m<sup>-3</sup>)

## 2. Run *wam\_series*

- **First test with a few matching images!** Match a single or a few images!
- **Experiment!** To create better-looking images you can use previously generated overlays, remapping to another projection, annotating with date, etc.
- Save as both **HDF** and as **PNG**
- If you are satisfied with the layout (including annotations), run *wam\_series* **for the whole series of images** and create a uniform series of images **for your area of interest**

### 3. Use WAM commands

- **wam\_l2\_map** A2007\2007156\*LAC map\_chl\_47\_180.hdf 32 20
- The same for SST
- **wam\_composite\_2x** A2007\_chl\_day\A\*mapped.hdf 5  
map\_chl\_47\_180.hdf 32 20
- **wam\_composite\_2x** A2007\_chl\_5day\A\*comp.hdf 15  
map\_chl\_47\_180.hdf 32 20
- **wam\_composite\_month** A2007\_chl\_day\A\*mapped.hdf  
map\_chl\_47\_180.hdf 32 20
  
- **wam\_composite\_last**
- **wam\_composite\_list**