CoastWatch Software and Utilities: CWMaster

cwmaster: "used to create a master file to define the map area."

CWMaster is used to create a map to apply to Level 2 data, thus making level 3 products. This tutorial could also be used to remap Level 3 data from the CoastWatch website in order to change the current projection. *Note: it is not advised to remap the same data file more than twice, as eventually you may get some numerical inaccuracies, similar to making a photocopy of a photocopy.

👙 cwmaste	r					_	
File Option:	s Help						
Open	Save Magnify) Shrink	Zoom	d ∰0 Pan	P Recenter	Reset	
Projection							
System:							
Mercator							
Datum:							
WGS 72		-	2		(=)	N 4 5	-
Parameters:			A 92	1.90	16 1		60 N
•				E A	J V		
Region		1	45 N		· •	R.	2
Dimensions (p Rows	bixels): Columns				12-	-	45 N
512	512						
Center locatio Latitude	n (degrees): Longitude						30 N
30	-90		15 N		-4	* -	
Pixel size (kilo Height	ometers): Width				They are	The second	151
20	20			-	→		
☑ Use square pixels			120.V	105.V	20.VV	NA DE	15 W.
Apply	Revert					_	
Latituda:	Longitude		Rowr		Column		_

Open CoastWatch Master Tool

- Define the map area by projection, resolution and/or coordinates. This can be done numerically or by using the interactive buttons.
- Save the file in HDF format, preferably in the same folder as the data. Give it a name like "cwmaster_tutorial_master.hdf" or your project name.

Now that you have the master file, you need to apply it to the CW HDF data file by using the command-line tool 'cwregister'.

Open a Command Prompt Window

(Start > Accessories > Command Prompt)

It is recommended to work within the same directory as the data. For example: prompt:\ cd "folder name"

🛤 Command Prompt		
Microsoft Windows XP [Version 5.1.2600] (C) Copyright 1985-2001 Microsoft Corp.		
Z:\>cd "HDF data"		
Z:\HDF data>cwregisterverbose your_project_master_file.hdf	input_coastwatch_data.hdf	output_filename.hdf_

- cwregister:

prompt>cwregister --verbose your_project_master_file.hdf input_coastwatch_data.hdf output_filename.hdf

You should see the program go through rows as it re-maps the data based on your master file.

The newly mapped data can then be viewed using the CoastWatch Data Analysis Tool (CDAT).

If you have any questions or problems, please contact Shawna Karlson at 301-763-8013 x349 or via email <u>Shawna.Karlson@noaa.gov</u>.