- 1) Where is the polarstar.map file located?
- 2) What is the name of the layers definition file?
- 3) Where is the file located that displays the ship information at the bottom of the web page?
- 4) What is the process for removing a point (that has been clicked on) in the measuring tool?
- 5) Is there another method for zooming in on the map besides a click on the map?
- 6) Can you use this method with any other mapserver function?

- 7) What type of information can be displayed with the Query (Info) button?
- 8) What are template html files used for and what directory are they located in?
- 9) What has to be included with each template html file?
- 10) How do you tell which symbols designate what layers?
- 11) What types of data files can be displayed in mapserver? What types can not be displayed in mapserver?

- 12) What command is used in the main map files to point to map files in other directories?
- 13) Where can information be found on mapserver errors?
- 14) What is the process for adding a layer to mapserver?
- 15) What are two types of shapefiles and how can you view a shapefile?
- 16) What commands are used to create a shapefile? What is the alternate method?

- 16) Ship tracks are created in what projection? The tracks are then converted into what projection?
- 17) What programs create the ship tracks? How are the programs run? How often do the programs run?
- 18) What type of shapefile is created to mark the current position of the ship?
- 19) What is the most important item to remember when editing the .map and .js files?

#### Ice Observations Review

- 1) What is the purpose of the Start Observations button?
- 2) Once an ice observation report has been created, what actions can be done with the report?
- 3) What types of summary reports can be produced from the ice observation reports?

#### TeraScan Review

- 1) When browsing the jpeg images, what are you looking for in the image?
- 2) Why does the navigation have to be corrected in the DMSP imagery?
- 3) What format are the resulting images that are displayed in mapserver?
- 4) What is the name of the program that is used for navigating the imagery?
- 5) When navigating an image, what are the most important items to remember?

#### TeraScan Review

- 6) How do you get the best result when navigating an image?
- 7) What is the purpose of the fastreg command?
- 8) How do you create a new master file?

- Covered tasks necessary for maintaining mapserver vs. in-depth explanation of how mapserver works.
- Only one person changing mapserver at a time.
- In some cases, projection information is not needed in the map file, if projection information is contained in a separate .prj file.
- Sometimes may need to empty cache or hold shift button when reloading page to see the latest results in the mapserver web page.

- Projections file for mapserver: /usr/share/proj/epsg
- www.remotesensing.org web pages.
- Web sites page: CSV to Shapefile Conversion gdal.org/ogr/drv\_csv.html
- List of mapserver directories and files
- Other mapserver web sites

### **New Cruise Setup**

- 1) Edit previous.js file Copy old cruise information to the previous cruises section.
- 2) Edit layers.inc.js file Change the current cruise information to the new cruise name.
- 3) Create a directory for the new cruise /mnt/mapserver/data/polarstar/data/cruise, where cruise is the name of the next cruise.
- 4) Add map files to the directory in step 3. Can copy the entire directory for the old cruise to the new cruise directory and update the files.

### **New Cruise Setup**

- 5) Edit polarstar.map file and add the include statements for the map files for the new cruise.
- 6) Set up process to create ship tracks for the new cruise.
- 7) Update the perl programs that create the track data files, completetrack.pl, partialtrack.pl and createtrack.pl. Change to directory in step 3.

#### **Current Cruise Files**

/mnt/mapserver/data/polarstar/data/ship

current\*.html – Template files for current ship position

track\*.html – Template files for ship track

track\_current\_stere\* - Data files for current ship position

track\_stere\* - Data files for ship track

fluorometer.map, salinity.map, sst.map, shiptrack.map –

Map files for displaying ship track data

#### **Current Cruise Directories**

complete – Contains track\_stere\* data files from the last completetrack.pl run. completetrack.pl adds an entire day to the data files. Usually, these files are not the same as the data/ship directory since partial days are run every 10 minutes.

temp – The new files are created in this directory and are moved to the data/ship directory once the program has finished running.

## Change Default Extent

- 1) Position map to area for new default extent.
- 2) View the last line in the log file. /mnt/mapserver/html/tmp/polarstar.log
- 3) Edit mapper.html file in the html directory. Change the current "var extent" line to have the new locations found in the log file.
- 4) Reload mapserver to verify it has changed to the new extent.

# Ordering of Layers in Mapserver

- 1) Move the include line for the Polar Sea cruise to the top of the map file.
- 2) Reload mapserver and try to display the Polar Sea ship track. Does it display?
- 3) Turn on the multibeam layers along with the Polar Sea ship track. Does it display?