

SOP 6: Raw HEX Files (OC_B Creation)

Version 1

Revision History Log:

Prev. Version #	Revision Date	Author	Changes Made	New Version #
[none]	Oct. 2010	S. Danielson, W. Johnson, L. Sharman, G. Eckert, B. Moynahan	Initial version	1

Summary

During the survey year cruises are made. At the end of each cruise day, data from each cast recorded on the CTD must be moved to a laptop computer file. The files undergo basic quality assurance. When the laptop files are complete, the CTD memory is erased to make room for the next day's collection.

At the end of each cruise, the laptop files are copied to the park's network file server.

At the end of each season, the network file copies are zipped into one file for the year. The Project Leader submits the one file to the Data Manager as OC_B. Validation / quality assurance iterations are performed until the Project Leader is satisfied the data are as accurate and complete as is practical. The Project Leader certifies the deliverable and the Data Manager arranges for repository and dissemination.

SOP 6 requires users to work in the internal NPS network under valid Active Directory accounts. Access questions should be directed to the Data Manager.

Detailed steps

1. In-season component

1. Project Leader tasks

1. During the field season, the oceanographic survey procedures described in SOP 4 must be successfully performed. They provide the required basis for performing this SOP.

2. Post-season component

1. Project Leader tasks

1. Verify all of the year's cruises are present as hex files in \\nps\akrdfs\GLBA\Science\Data\Oceanography\Data\yyyy\HEX_raw\
 1. *If any hex files are missing and cannot be located, this should be marked on the original field log sheet before it is scanned and preserved. The information will be needed when building the OC_M quality assessment and OC_K annual report at the end of the cruise season.*
2. Zip all the hex files in into a single file stored in the same folder.
 1. *Bring up the HEX_raw folder in Windows explorer*

1. Select all files.
 1. Left click one of the HEX files to select it.
 2. Press Control-A to select the remaining.
 3. If any non-HEX files were in the folder, deselect them by holding down the control key and left clicking each one.
 2. *Create a single ZIP file containing all HEX files using WinZip*
 1. In Windows explorer, right click one of the selected files and hold right button until a menu appears – this may take awhile, be patient.
 2. From the menu that appears, point to WinZip.
 1. If WinZip is not on the menu, contact IT support for help.
 3. On the sub-menu that appears, select “Add to Zip File...”
 4. On the “Add” dialog box that appears, append the final product’s filename to the existing path.
 1. The default path shown should be the folder containing the HEX files.
 2. Name the archive file HEX_yyyy_a.zip .
 1. ‘yyyy’ is the calendar year.
 2. Sequence letter ‘a’ is A for first attempt, B for second, etc.
 3. For example, the third attempt at creating a valid 2011 OC_B deliverable would use filename HEX_2011_C.ZIP.
 5. Press the “Add” button and the new file will be created from all selected HEX files.
 3. *Submit the deliverable file via email notification to the Data Manager for validation.*
 1. Specify in the message body it is deliverable OC_B, as defined in protocol OC-2010.1.
 2. Specify the fully qualified filename that the ZIP resides in.
 3. Do not attach the ZIP file to the email, as it may be too large to be delivered.
 1. *Do not alter the deliverable file after the submission email has been sent; that could break the validation process.*
- 2. Data Manager tasks**
1. On receipt of the submission, assign the next formal Submission Number to this file using the “Update Submission Log” web tool at http://165.83.57.239/0_submission_update.aspx.
 2. Complete Submission_Log details up through the Submission_Date column.
 3. Copy the file into the staging area for validation at [\\inpglbafs03\data\SEAN_Data\Staging\OC\OC_B](\\inpglbafs03\data\SEAN_Data\Staging\OC\OC_B).
 1. *Put it in its own subdirectory whose name is the same as the submission number.*
 2. *Ensure its name meets the standards defined in Appendix J.*
 4. Unzip the file into its component HEX files in the staging area.
 5. Invoke validation of the HEX files according to current criteria by using the web program at http://165.83.57.239/OC_DM_validate_OCB.aspx (See also Appendix J).
 1. *Validation summary results automatically are recorded in the Submission_Log.*
 6. If submission fails mandatory criteria, reply with a “failure email” that includes:
 1. *The submission number assigned*
 2. *The deliverable ID*
 3. *The protocol ID*
 4. *A specific list of all the mandatory criteria failed*
 1. Copy and paste the “findings” panel of OC_DM_validate_OCB.aspx into the email message.

2. Alternatively, attach the “findings.htm” file that was automatically created in the staging subdirectory.
7. If submission passes mandatory criteria, reply with a “success email” that includes:
 1. *The submission number assigned*
 2. *The deliverable ID*
 3. *The protocol ID*
 4. *Documentation listing any specific optional criteria failed*
 5. *Request to certify deliverable as complete*

3. Project Leader tasks

1. On receipt of a failure email:
 1. *Make corrections so the deliverable meets mandatory criteria.*
 1. Print out the findings from the email if desired for ready reference.
 2. It may be convenient to have the scanned field log forms (OC_H) accessible in order to help resolve exceptions.
 3. Edit each original file using WordPad.
 1. Be aware these are the original source records and editing must be done with care to avoid introducing new errors.
 2. When a file is corrected, save it on top of the existing file.
 2. *In case of accident, files may be restored to original state by obtaining copy of previous submission from Data Manager*
 3. *Restart the process from the beginning of the post-season component process.*
2. On receipt of a success email, review any failed optional criteria:
 1. *If these are acceptable:*
 1. Reply with a “certification email” stating the deliverable is certified and may be disseminated.
 2. *If these are unacceptable:*
 1. Reply with a “withdrawal email”, stating the deliverable is withdrawn.
 2. Take remedial action to obtain a corrected deliverable.
 3. Restart the process from the beginning.

4. Data Manager tasks

1. On receipt of a withdrawal email:
 1. *Mark the withdrawal in the Submission_Log’s Status column using the web tool.*
 2. *Terminate the process.*
2. On receipt of a certification email:
 1. *If sensitive information is in the unzipped deliverable:*
 1. Products containing sensitive information cannot be disseminated.
 2. Mark the Submission_Log’s Status column as Sensitive using the web tool.
 3. Copy the submitted single zip file to test environment as AUXREPI\OC\OC_B\SENSITIVE\ HEX_yyyy.zip (no version letter in name).
 2. *If NO sensitive information is in the unzipped deliverable:*
 1. Copy the submitted single zip file to test environment at AUXREP\OC\OC_B\ HEX_yyyy.zip.
 2. Create web page links to the new file.
 3. Mark the certification status and date in Submission_Log using the web tool.
 3. *Propagate from test to production environment.*
 4. *Verify non-sensitive deliverable is accessible from production web site.*
 5. *Update the annual deliverable tracking spreadsheet with the date of completion for OC_B.*
 6. *RETAIN the individual files from the staging area.*
 1. This will serve as the original CTD file backup.

2. The original CTD files on the park server are typically directly edited in the validation process, so the staging backup is necessary.
3. Using NPS Metadata Editor software, update the scope of the formal metadata so it includes this new date range.

