FILE EDITING ON THE HP3000
FOR THE SEDIMOT II COMPUTER MODEL

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1. Introduction

Since the release of the SEDIMOT II model, the Agricultural Engineering Department has taught approximately 300 consulting and mining engineers, reclamation specialists, government agency personnel, and academia. The program is being used on all types of computer systems, company owned as well as time sharing vendors. Over 50 firms are using the HP3000 system of the College of Agriculture at the University of Kentucky under arrangements with the Institute for Mining and Minerals Research, Office of Informational Services and Technical Liaison.

First exposure to the program is usually through the interactive version. The more experienced user will normally make changes to the input data file in the editor and run SEDIMOT II in the batch mode of operation. Still more experienced users will build batch input files directly in the editor.

The purpose of this Agricultural Engineering Update is to provide information concerning the file editor on the HP3000 system. It is provided to accelerate users up the learning curve and to assist in making a rapid transition from novice to expert with respect to data input. Step-by-step procedures are shown, which will enable the user to become proficient in file editing. Using the editor will save significant time for the consultant and assist in determining cost-effective sediment management schemes.
II. Creating a Data File Interactively

The easiest and most accurate way to set up a data file for SEDIMOT II is to use the interactive mode of operation. Answer the first five questions in the following manner:

1. ENTER ONE OF YOUR FILENAMES AS A PASSWORD FOR RUNNING SEDIMOT.
   ? S99999999

2. ENTER THE KIND OF RUN YOU WOULD LIKE
   1 = BATCH
   2 = INPUT
   ?2

3. WOULD YOU LIKE YOUR INPUT SAVED IN A DATA FILE (Y/N)? Y

4. ENTER A FILENAME FOR THE DATA FILE (MAX. LENGTH = 8 CHARACTERS)
   ?S99999999

5. WOULD YOU LIKE TO SEE TABLES AND HAVE A CHANCE TO CORRECT YOUR ANSWERS AT THE END OF EACH GROUP OF QUESTIONS?
   Y = SEE TABLES AND MAY CORRECT ANSWERS
   N = NO CHANCE TO CORRECT ANSWERS
   ?Y

Next, continue answering specific model related questions. Once the program is finished running, the data file that has just been created is automatically saved under the filename specified (in this case, S99999999). NOTE: The filename must be one of the two names provided by IMMR.

III. Updating Data Files Through the Batch Mode of Operation

Once the file is created from running SEDIMOT II interactively, the program can be run in the batch mode using this file as the input data file. The input, including any changes made, can be stored in another file. To run the program in the batch mode with a previously created data file, answer the first six questions in the following manner:

1. ENTER ONE OF YOUR FILENAMES AS A PASSWORD FOR RUNNING SEDIMOT.
   ? S99999999

2. ENTER THE KIND OF RUN YOU WOULD LIKE
   1 = BATCH
   2 = INPUT
   ?1

3. ENTER THE FILENAME OF THE DATA FILE
   ?S99999999

4. WOULD YOU LIKE ANY CHANGES MADE TO BE KEPT IN A PERMANENT DATA FILE?
   (Y/N)? Y
You may answer the previous question either YES or NO. The next question will be asked only if you answer YES.

5. ENTER A FILENAME FOR THE NEW FILE (MAXIMUM LENGTH = 8 CHARACTERS)
   ?T9999999

6. WOULD YOU LIKE TO SEE TABLES AND HAVE A CHANCE TO CORRECT YOUR ANSWERS AT THE END OF EACH GROUP OF QUESTIONS?
   Y = SEE TABLES AND MAY CORRECT ANSWERS
   N = NO CHANCE TO CORRECT ANSWERS
   ?Y

Tables will be printed showing the previous inputs and giving the user a chance to change them. If the answer to Question 4 was YES, the changed data file is stored with the name specified (in this case, T9999999). Whether YES or NO, the original file (S9999999) is unchanged, and the results of this run reflect any changes just made. NOTE: The new file name must be the other of the two names provided by IMMR.

Once both data files are used, one of the files must be purged in order to reuse the name. File purging, which is done outside of the SEDIMOT II program, is accomplished as follows. After receiving a colon (:) prompt, type:
   PURGE filename

WARNING: Be sure to purge the right file. DO NOT purge the file containing the information needed to create the new file. Once a file has been purged, it CAN NOT be recovered.

As a file protection, SEDIMOT II will not allow an existing file to be opened as a new file. If a user attempts to open a new file under an existing name, the following message will appear:

   THIS FILENAME ALREADY EXISTS. PLEASE ENTER A NEW FILENAME.

If a nonexistent filename is used to open an old file, while running the program in the batch mode, the program will abort and the following message will appear.

   STOP. UNABLE TO OPEN FILE.

IV. Modifying Existing Data Files Through the HP3000 Editor

The commands needed to modify data files for SEDIMOT II are described herein. For a more complete description of the HP3000 editor, order the manual entitled, "Using the HP3000." It can be ordered from Hewlett-Packard, part no. 03000-90121. The commands that will be covered in this section are TEXT, LIST, ADD, DELETE, MODIFY, and KEEP.

Entering the Editor Subsystem and Using the TEXT and LIST Commands

The first step to editing a file is to pass control into the editor subsystem and access that file. To get into the editor, simply type the word EDITOR after receiving a colon prompt. A message will appear saying control is in the EDIT/3000 subsystem. Once in the editor, slash (/) prompts will appear instead of colons. To access a file, type:

   TEXT filename
When another slash prompt appears, the file is in the work space and ready to be edited.

Sometimes it is necessary to list all or part of a file. To list it all, type:

LIST ALL

To list a series of lines, type:

LIST first line no./last line no.

The following are examples of valid LIST commands.

LIST ALL
LIST 14
LIST 23/46
LIST 52/LAST

Example of Getting into the Editor Subsystem and Using the TEXT and LIST Commands.

:EDITOR
HP32201A.7.10 EDIT/3000 TUE FEB 22, 1982, 2:08 PM
(C) HEWLETT-PACKARD CO. 1981
/TEXT XmplFile
/LIST ALL
  1 EXAMPLE LINE ONE
  2 EXAMPLE LINE TWO
  3 EXAMPLE LINE THREE
  4 EXAMPLE LINE FOUR
  5 EXAMPLE LINE FIVE
/

Using DELETE and ADD Commands

To delete a line, type:

DELETE line no.

To delete a series of lines, type:

DELETE first line no./last line no.

Lines may be added between existing lines by numbering them with decimal numbers between the two existing line numbers. For example, to add a line between lines 14 and 15, enter the command:

ADD 14.1

The computer will reply 14.1. Type in the line to be added and hit RETURN. The computer will reply 14.2. If needed, add another line at that point. Keep doing this over and over until all the lines needed at a particular point have been added. When no more lines are needed, type two slashes (//) after the line number.
Example of Using the DELETE and ADD Commands

:EDITOR
HP32201A.7.10 EDIT/3000 TUE, FEB 22, 1983, 2:10 PM
(C) HEWLETT-PACKARD CO. 1981
/TEXT XmplFile
/LIST ALL
  1  EXAMPLE LINE ONE
  2  EXAMPLE LINE TWO
  3  EXAMPLE LINE THREE
  4  EXAMPLE LINE FOUR
  5  EXAMPLE LINE FIVE
/DELETE 2
  2  EXAMPLE LINE TWO
/LIST ALL
  1  EXAMPLE LINE ONE
  3  EXAMPLE LINE THREE
  4  EXAMPLE LINE FOUR
  5  EXAMPLE LINE FIVE
/ADD 3.1
  3.1  FIRST LINE ADDED IN EXAMPLE
  3.2  SECOND LINE ADDED IN EXAMPLE
  3.3  //
/LIST ALL
  1  EXAMPLE LINE ONE
  3  EXAMPLE LINE THREE
  3.1  FIRST LINE ADDED IN EXAMPLE
  3.2  SECOND LINE ADDED IN EXAMPLE
  4  EXAMPLE LINE FOUR
  5  EXAMPLE LINE FIVE
/

Using the MODIFY Command

For changing a SEDIMOT data file, the most useful command of the editor is MODIFY. To modify a line, type:

   MODIFY line no.

The line will appear on the screen with the cursor on the line below. Move the cursor over, with the space bar, to directly under the value that needs changing. Type R and the new value. R stands for Replace. There is not a space between R and the new value. Hit the RETURN key. The changed line will appear. Replace more values on the line in the same way, or hit RETURN again to signal to the computer that the line has been modified. When RETURN has been hit twice in a row, a slash prompt will appear.

Example of the MODIFY Command

/ / / / /MODIFY 94
   MODIFY 94
   36.000 36.000 1.000 .500 200.000 3.100 .600 .025 18.000 12.000
   R40.000
   40.000 36.000 1.000 .500 200.000 3.100 .600 .025 18.000 12.000
   R40.000
   40.000 40.000 1.000 .500 200.000 3.100 .600 .025 18.000 12.000

,
Using the KEEP Command and Leaving the Editor Subsystem

When all the changes have been made to the file, the newly changed file must be stored in the computer's memory. It can be stored with the same name as the original file and written over the original file, or named something new, and the original file remains unchanged. To keep it with the same name, simply type:

KEEP

The computer will print the filename and the following message:

 THIS FILENAME ALREADY EXISTS. DO YOU WISH TO PURGE OLD AND KEEP NEW? Type:
YES

To keep the changed file with a different name, type:

KEEP filename

To get control out of the editor subsystem, and back to the main system type:

END

Example of the KEEP and END Commands

/KEEP
XMPLFILE, UNN
XMPLFILE ALREADY EXISTS - RESPOND YES TO PURGE OLD AND KEEP NEW
PURGE OLD?YES
/END
END OF SUBSYSTEM
:

Now control is back in the main computer system and SEDIMOT can be run with the new data file. Run it in the batch mode, and answer NO to the question, "DO YOU WISH TO SEE TABLES AND HAVE A CHANCE TO CORRECT ANSWERS?"

V. Building Data Files on the HP Editor

This section deals with building a data file directly in the editor subsystem and running SEDIMOT II in the batch mode using that file. Fill out the sheet on page 205, Part II of the User's Manual, before connecting, to save connect time.

To build a new file, first get into the editor, as discussed before, and then type:

SET LENGTH = 80, Right = 80

After a prompt, type:

ADD

The computer will respond with 1. Keep adding lines as discussed before, until the entire file has been entered. Then type two slashes (//) on the line after the last line of the data file. The file is now entered temporarily, but must still be kept to be permanent. Type:

KEEP filename, UNN

Type END to leave the editor subsystem.
Example of Building a File

:EDITOR
HP32201A.7.10 EDIT/3000 TUE, FEB 22, 1983, 2:28 PM
(C) HEWLETT-PACKARD CO. 1981
/SET LENGTH = 80, RIGHT = 80
/ADD
1  MANUAL EXAMPLE PROBLEM 1
2   2   2
3   4.2 24.0 0.1 1.0
4   1   1
5   1
6   1
7   0.0 0.0 0.0
8   1   1   2   1   1
9  114.2 55.0 0.755 0.0 0.0 0.0 1.0 3.0
10   //

/KEEP S9999999, UNN
/END

This file can be modified in the editor as though it were created using SEDIMOT II interactively. The command SET LENGTH = 80, RIGHT = 80 only has to be used the first time the file is created. If this file is edited, it can be kept as explained in part IV. UNN only has to be used the first time the file is created.

VI. Tips on Using the Editor and Running SEDIMOT on the HP3000

1. The commands TEXT, LIST, ADD, DELETE, MODIFY, KEEP, and END can be abbreviated by their first letter.

2. If a file is being edited and the user realizes he/she would like to leave it as it was originally, then the following needs to be done. Type END without having typed KEEP. The computer will respond, "DO YOU WISH TO CLEAR?" Respond YES. This will take control out of the editor subsystem and the file will remain as it was when texted.

3. To stop a run of SEDIMOT II (or any other program) in the middle of the run, do the following:
   a. Hit the BREAK key
   b. When a colon appears, type ABORT.
   Any file that was being created will be lost. If a file was being used to run the program in the batch mode, it remains unchanged.

4. If the terminal used has both upper and lower case, make sure the CAPS LOCK key is ON. In any question that is to be answered YES or NO, SEDIMOT is only looking for a capital Y in the first position. Anything else, including a lower case y, is taken to mean no.