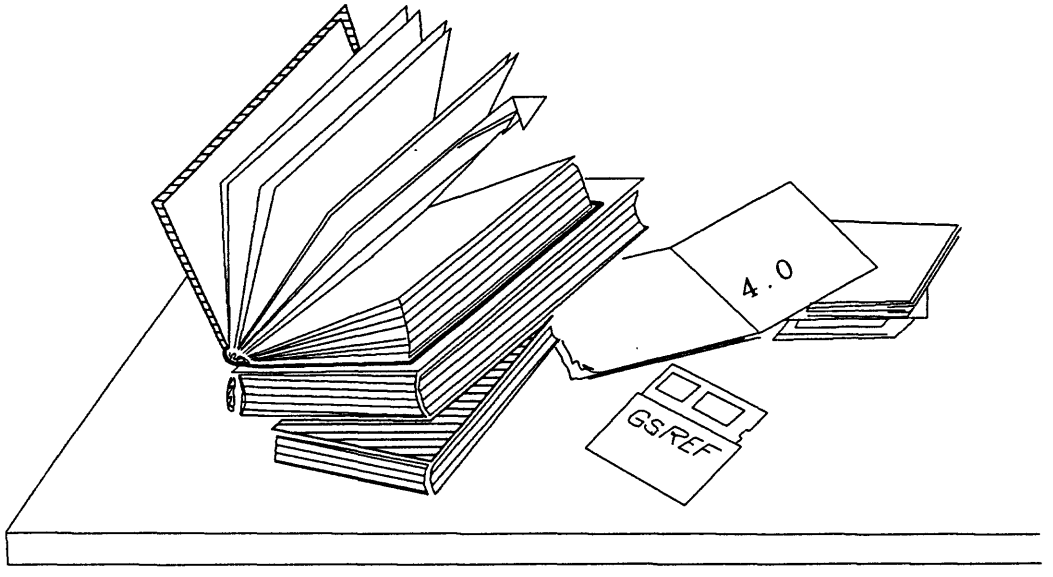
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GSREF VERSION 4.0: A BIBLIOGRAPHIC REFERENCE SYSTEM FOR THE IBM PC AND COMPATIBLE MICROCOMPUTERS

by

Gary I. Selner and Richard B. Taylor



Open-File Report 90-229

DISCLAIMER

Although program tests have been made, no guarantee (expressed or implied) is made by the authors or the U.S. Geological Survey regarding program correctness, accuracy, or proper execution on all computer systems. Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey. This report is preliminary and has not been reviewed for conformity with the U.S. Geological Survey editorial standards.

Denver, Colorado
April 1990

Note for the Monthly list:

USERS GUIDE FOR GSREF VERSION 4.0: A BIBLIOGRAPHIC REFERENCE SYSTEM FOR THE IBM PC AND COMPATIBLE MICROCOMPUTERS

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The GSREF program has been developed to organize, store, and retrieve bibliographic citations. The program allows the user to store a bibliographical citation with keywords that allow the citation to be recalled later by content (including author), keyword(s) or reference number. If references are filed by reference number, GSREF provides a quick, convenient filing system. The citations are always retrieved in an alphabetic sequence and can be printed or stored in a publication style text file for direct inclusion in a report prepared using a word processing system. Version 4.0 adds edit capability and capability for annotation of citations to the previously released Version 3.1, Open File Report 86-0186.

GSREF requires a computer that uses the DOS disk operating system and a working familiarity with the use of the computer and DOS. The computer should have at least 512 Kbyte of memory, at least one disk drive, and a printer connected to LPT:1 (parallel port #1). GSREF Version 4.0 was written using Microsoft QuickBasic.

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PRINT OF README FILE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

USERS GUIDE FOR GSREF VERSION 4.0: A BIBLIOGRAPHIC REFERENCE SYSTEM FOR THE IBM PC AND COMPATIBLE MICROCOMPUTERS

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Gary I. Selner and Richard B. Taylor

Open-File Report
90-229 Documentation and Program Disk (5.25 inch, 360 Kbyte format

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Basic Information

Purpose of GSREF

The GSREF program has been developed to organize, store, and retrieve bibliographic citations. The program allows the user to store a bibliographical citation with keywords that allow the citation to be recalled later by content (including author), keyword(s) or reference number. If references are filed by reference number, GSREF provides a quick, convenient filing system. The citations are always retrieved in an alphabetic sequence and can be printed or stored in a publication style text file for direct inclusion in a report prepared using a word processing system.

System requirements

To use GSREF you need a computer that uses the DOS disk operating system and a working familiarity with the use of the computer and DOS. The computer should have at least 512 Kbyte of memory, at least one disk drive, and a printer connected to LPT:1 (parallel port #1). Familiarity with the basics of computer usage and DOS is essential but you don't need to be an expert.

Program

GSREF Version 4.0 was written using Microsoft QuickBasic.

Source code for GSREF can be obtained by writing to the authors and providing a formatted 360 Kbyte disk

Major changes from Version 3.1

1- Addition of an editor to permit revision of text and keywords
2- Addition of a feature permitting annotation of citations and

retrieval on the basis of annotations. Citations alone or citations with annotations can be retrieved.

INTRODUCTION

Basic Information

Purpose of GSREF

The GSREF program has been developed to organize, store, and retrieve bibliographic citations. The program allows the user to store a bibliographical citation with keywords that allow the citation to be recalled later by content (including author), keyword(s) or reference number. If references are filed by reference number, GSREF provides a quick, convenient filing system. The citations are always retrieved in an alphabetic sequence and can be printed or stored in a publication style text file for direct inclusion in a report prepared using a word processing system.

System requirements

To use GSREF you need a computer that uses the DOS disk operating system, and has at least 512 Kbyte of memory, at least one disk drive, and a printer connected to LPT1: (parallel port #1). You should have a working familiarity with the use of the computer and DOS; if you are not sure about operating the computer, seek the advice of someone more experienced.

Menus

GSREF makes use of two menus: a Main Menu and a Data Management Menu. Choices from the Main Menu mainly provide retrieval functions; those from the Data Management Menu provide other functions related to the data base. The user chooses a function by typing the number that appears to the left of the desired function utilizing the keys at the top of the keyboard, followed by a carriage return (hit the ENTER key). The program then can execute the selected function.

GSREF data base files

A GSREF data base consists of three DOS files: an Index File, a Keyword File and a Data File. The user supplies the name of the data base and the GSREF supplies appropriate extensions for each of the files. The data base name must follow DOS conventions for the name of a file.

Index file

The Index File has the extension NDX. The file is used to maintain the alphabetical sequence of entries, locate text within the Main Data File and record the number and value of keywords for each citation.

Keyword file

The Keyword File has the extension KEY. The file is used to contain all of the keyword values that have been entered. It is used to check for errors in keyword entry and in retrieval by keyword.

Main data file

The main data File has the extension REF. The file contains the text that makes up a citation. The file is searched during retrieval by text in content, and is the source of the records for a citation that are displayed when using all retrieval options.

Getting acquainted with GSREF

The best way to become familiar with the use of GSREF is to read this manual, then use the program to enter a few references and try out its features with this small data base. You are strongly encouraged NOT to spend hours entering references until you are thoroughly familiar with what GSREF can do and just as importantly what it can not do! Copy the file GSREF.EXE from the release disk to a working copy. No other files are required. In this document, the term "ENTER" means type the response to a prompt followed by hitting the ENTER key (also called the RETURN KEY).

GSREF Version 4.0

Version 4.0 of GSREF has been written in Microsoft QuickBasic. This version of GSREF succeeds Version 3.1 which was written in Fortran. Both are loosely based on previous work done by Selner, Gettings and North (1981) while part of the U.S. Geological Survey-Saudi Arabian Mission. The GSREF program is in the public domain and can be freely copied and provided to others.

To start the program enter **GSREF**. After brief display of the disclaimer screen the Main Menu will be displayed. **Or** if you wish to start the program and immediately open an existing data base, enter GSREF followed by a blank space and the name of the data base, e.g. **GSREF COLORADO**. If this is done information on the contents of the data base will be displayed on the screen. The Main Menu screen appears as shown below. After a data base has been opened, the name of the data base will appear on the screen, under the words CURRENT DATA BASE. Operations must start either with Option 1, OPEN A NEW DATA BASE or with Option 2, OPEN AN EXISTING DATA BASE. The name of a data base is specified by entering the name of the data base; the DOS extensions of the various files are not entered.

Main Menu

```
                    G   S   R   E   F

                    M A I N   M E N U
```

```
                                              CURRENT DATA BASE:
  1 - START A NEW DATA BASE
  2 - OPEN AN EXISTING DATA BASE
  3 - CHANGE DEVICE/STYLE OF OUTPUT
  4 - BROWSE THE CURRENT DATA BASE
  5 - RETRIEVE BY REFERENCE NUMBER
  6 - RETRIEVE BY KEYWORD
  7 - RETRIEVE BY CONTEXT
  8*- DATA MANAGEMENT MENU
  9 - EXIT

 ENTER CHOICE:  ?
```

The default option (hit ENTER key is indicated by the asterisk on the display, and is option 8, change to the DATA MANAGEMENT MENU.

Option 1, START A NEW DATA BASE

Enter the name to be used for the new data base. The name must follow DOS conventions for file names (eight characters or less, no periods, and no distinction between upper and lower case characters). Extensions for the three files forming the data base will be supplied by the program. After this entry operations will return to the Main Menu.

Option 2, OPEN AN EXISTING DATA BASE

Enter the name of the data base. Do not enter an extension. After entry of the data base name a message will be displayed in the format below:

THERE ARE 343 REFERENCES IN CURRENT DATA BASE
THERE ARE 17 KEYWORDS
HIT RETURN TO CONTINUE.

Deleted references are counted in the count of references. Deleting a reference does not save space in the data file, but deleted references will not be included in output from the program. Hit the ENTER key, and operations will return to the Main Menu.

Option 3, CHANGE DEVICE/STYLE OF OUTPUT.

Option 3 is used to direct output to the screen, to a printer connected to LPT1: (parallel port #1) or to a file with a name chosen by the user, and to select either a publication style format or a data base style format providing the number of the reference and the keywords as well as the reference. The default at the start of a session in GSREF is output to the screen in data base style.

After selecting option 3 the choices are the following as indicated by the prompts:

1 - SCREEN OUTPUT
2 - PRINTER OUTPUT
3 - DISK FILE OUTPUT
ENTER CHOICE: ?

Enter the number of the desired choice, **1, 2, or 3.**

Selection of **3** will call another prompt:

ENTER FILENAME: ? calls for entry of the name of the file to be used to store the output reference list. Enter the full name (including extension of the file to be used for data storage.

After selection of the output device prompts will call for selection of the style of output. The prompts will be:

1 - PUBLICATION STYLE OUTPUT
2 - DATA BASE STYLE OUTPUT(INCLUDES REF#)
ENTER CHOICE: ?

Enter **1** or **2**

Example of output format #1, Publication style.

Olson, J.C., 1974, Geologic map of the Rudolph Hill quadrangle,
Gunnison, Hinsdale, and Saguache Counties, Colorado: U.S.
Geological Survey Geologic Quadrangle Map GQ-1177. \

Example of output format #2, Data base style.

REFERENCE NUMBER 22 CONTAINS 3 LINES OF TEXT 4 KEYWORDS
Bromfield, C.S., 1967, Geology of the Mount Wilson quadrangle,
western San Juan Mountains, Colorado: U.S. Geological Survey
Bulletin 1227, 100 p. \
CO Au 24000 IG

The character \ at the end of each reference is present because this data base was created from a text file written using a word processing program using the character \ (ASCII=92) to mark the end of each reference.

Option 4, BROWSE THE CURRENT DATA BASE.

This option permits easy inspection of the data base, and if desired, output of selected references. The response to the first prompt selects the starting point in the file for the start of the browse session using the first two letters on the first line of the reference (usually the first author's last name). From this point records can be examined in alphabetical sequence, either forward or backward in the file.

ENTER TWO ALPHABETIC CHARACTERS FOR STARTING POSITION
AA-ZZ (OR RETURN TO START AT BEGINNING): ?

Enter the required characters, or hit the RETURN KEY to start the session at the first reference in alphabetical sequence order. The program will begin at the chosen entry point, display the reference on the screen and below it the prompt:

SEND TO OUTPUT (Y/N*): ?

If you enter Y the reference will be sent to the output (the default set when opening the program is to type the reference on the screen in data base format (keywords and reference number displayed) (the output device and format can be changed using Option 8). The next prompt will ask:

INDICATE DIRECTION (B=BACK,F*=FORWARD,Q=QUIT): ?

Enter **B** to browse in reverse alphabetical sequence, enter **F** or use the Enter key to browse in alphabetical sequence. Enter Q to return to the Main Menu.

Option 5, RETRIEVE BY REFERENCE NUMBER

Prompt for Option, ENTER REFERENCE NUMBER (TO EXIT ENTER 0):

The selected reference will be displayed on the screen. Hitting the RETURN key at the prompt HIT RETURN TO CONTINUE, Q TO QUIT will continue this retrieval until entry of Q or 0 returns operations to the Main Menu. If Option 8, CHANGE DEVICE/STYLE OF OUTPUT has been used to change the default screen output to output to a file, references will be sent directly to the file without screen display.

Options 6 and 7, RETRIEVE BY KEYWORD, and RETRIEVE BY CONTEXT

These options for data retrieval enable retrieval of references for inspection and output. Keywords form the basis for retrieval using option 5, words in the reference citation using option 6. The means of requesting retrieval is the same for both options.

```
TESTS ARE SPECIFIED BY TYPING A PREFIX (FOR OR NOT) FOLLOWED
BY A COMMA, THEN A TEST VALUE(KEYWORD OR TEXT) FOLLOWED BY
A COMMA, THEN A CONNECTOR (AND or OR) FOLLOWED BY ENTER KEY
IF VALUE CONTAINS A COMMA ENCLOSE THE VALUE IN DOUBLE QUOTES
OMIT CONNECTOR ON LAST LINE.
EXAMPLE: FOR,"Selner, G. I." AND
FOR, "Taylor, R. B.",
```

```
ENTER TEST CONDITIONS (PREFIX, VALUE, CONNECTOR)
ENTER QUIT,, TO EXIT
```

The VALUE requested above is a keyword for option 6, a character, word, phrase, or other group of characters for Option 7. Up to 12 lines can be used to specify selection criteria. Keywords and text are case-sensitive.

Option 8, DATA BASE MANAGEMENT MENU

This option shifts operation to the DATA BASE MANAGEMENT MENU
Enter **8** or hit the ENTER key.

Option 9, EXIT

This option returns operations to the DOS prompt. Enter **9**.

The text editor is used under Options 1 (ADD AN ENTRY) and 4 (EDIT AN ENTRY) from the Data Management Menu. The character ^ is used below to indicate the use of the (control) key. For example, ^G (to delete a character, means hold the control key down, then press the G key, either lower case or upper case. A help screen reached by using the F1 key summarizes most of the available functions.

Help screen

```
          EDITING COMMANDS-

 -CURSOR MOVEMENT    -DELETE            -OTHER-
 ^S = char. left     ^G  = char         ^N = insert line
 ^D = char. right    Del = char. left   ^V = INSERT on/off
 ^A = word left      ^T  = word right   ^B = reformat
 ^F = word right     ^Y  = line         HOME= beginning of line
 ^E = line up                           END = end of line
 ^X = line down                         ^R = get text of an entry

 -ALTERNATE KEYS-
 ← = char. left                         INSERT = insert on/off
 → = char. right                        ENTER  = insert line
 ↑ = line up
 ↓ = line down


     HIT ANY KEY TO CONTINUE
```

Delete:
^G Delete the character at the cursor
DEL = delete the character to the left of the cursor
^T Delete the word to the right of the cursor
^Y Delete the line marked by the cursor
Cursor movement:
The → key or ^D moves the cursor one character to the right
The ← key or ^S moves the cursor one character to the left
The ↑ key or ^E moves the cursor up one line
The ↓ key or ^X moves the cursor down one line
^A or ^← moves the cursor one word left
^F or ^→ moves the cursor one word right
Home moves the cursor to the beginning of a line
End moves the cursor to the end of a line
Other:
^N is used to insert a line.
^B is used to reformat text from the line the cursor is on through the end of the reference . The line length is set at 72 characters.
^R is used to read the contents of a previous reference and copy it into the current reference. A prompt will ask for the **number** of the reference to be copied.

The editor opens in <u>insert</u> mode. The Ins (insert) key or ^V can be used to toggle between insert and overwrite modes. The insert mode cursor _ changes to a blinking ▒ in overwrite mode.

Rules of the road for data input

A reference citation can contain 1-20 lines.
A single reference citation can have 0-12 key words.
A data base can have 0-1000 key words.
Examples of the two file formats for data input are provided below:

```
Example of format #1.
Obradovich, J.D., 1982, NDS 157; Albian, K-Ar/biotite-bentonite, Middle
West North American Basin, in Odin, G.S., ed., Numerical dating in
stratigraphy: John Wiley & Sons, p. 838-839. \

Example of format #2
REFERENCE NUMBER    1636 CONTAINS    3 LINES OF TEXT  8 KEYWORDS
Obradovich, J.D., 1982, NDS 157; Albian, K-Ar/biotite-bentonite, Middle
West North American Basin, in Odin, G.S., ed., Numerical dating in
stratigraphy: John Wiley & Sons, p. 838-839.
chron       geol        mz        sw        K         bent
Ar          mica
```

Data Management Menu

```
                G   S   R   E   F

  D A T A    M A N A G E M E N T    M E N U
```

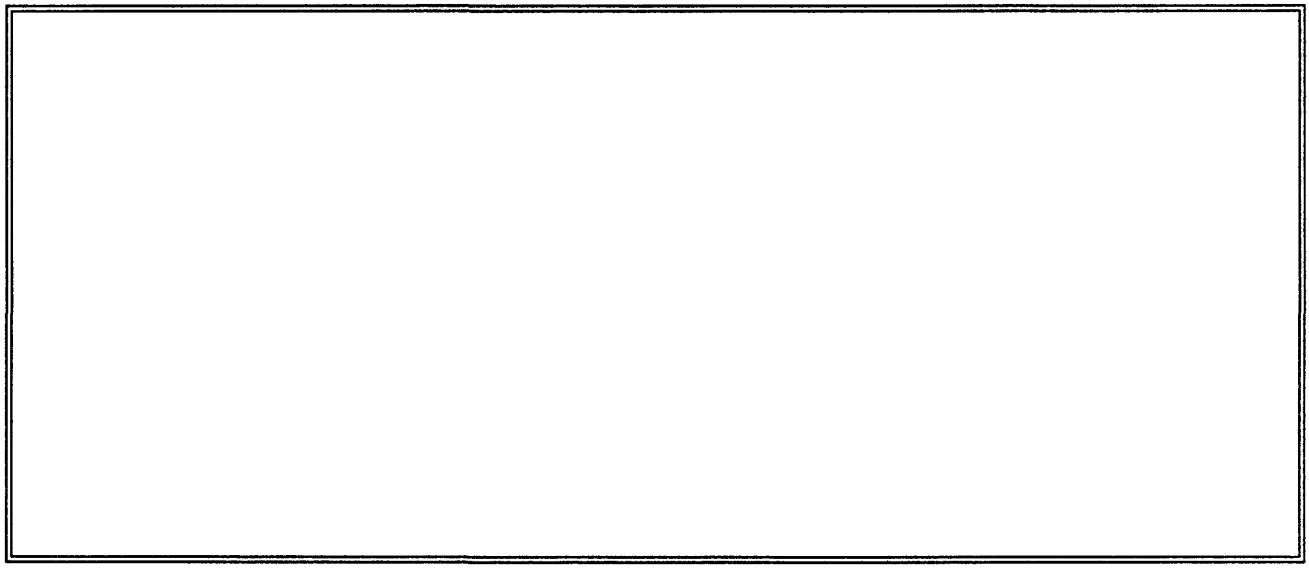
```
                                              CURRENT DATA BASE:
  1 - ADD AN ENTRY
  2 - ADD A KEYWORD
  3 - DELETE AN ENTRY
  4 - EDIT AN ENTRY
  5 - IMPORT A FILE CREATED BY A TEXT PROCESSOR
  6 - LIST KEYWORDS (SORTED)
  7 - EXPORT DATA BASE TO ASCII FILE
  8 - IMPORT A SORTED ASCII FILE
  9*- RETURN TO MAIN MENU

 ENTER CHOICE:?
```

The default option (hit ENTER key) is indicated by the asterisk on the display, and is option 9, change to the Main Menu.

Option 1, ADD AN ENTRY

Selection of option 1 provides a screen used for data entry so that a reference can be added to the data base. Use the text editor to enter the desired reference in standard format. After entry of the citation, save the reference in the data base by using the F10 key.



F1 KEY FOR HELP F9 TO EXIT wo/saving F10 TO EXIT AND FILE

Prompts will then call for entry of keywords, ending when the ENTER key is used instead of entering another keyword.

If the keyword is not contained in the existing keyword file a prompt will ask, IS THIS A NEW KEYWORD?(Y/N*):

If you wish to add the word to the keyword file, enter Y then enter the keyword, and proceed. Hitting the ENTER key in response to the ENTER KEYWORD prompt will return operation to the Data Management Menu.

Option 2, ADD A KEYWORD

Use this option to add a keyword to the list in the keyword file. A data base can have as many as 1,000 keywords. A keyword can have as many as 12 characters. Keywords are case sensitive.

The prompts are:
ENTER NEW KEYWORD: Respond by entering the a new keyword.
OK?(Y*/N) Confirm by entering Y or striking the ENTER key.
ADD ANOTHER(Y*/N) To add another enter Y or hit the ENTER key. To return to the Data Management Menu enter N.

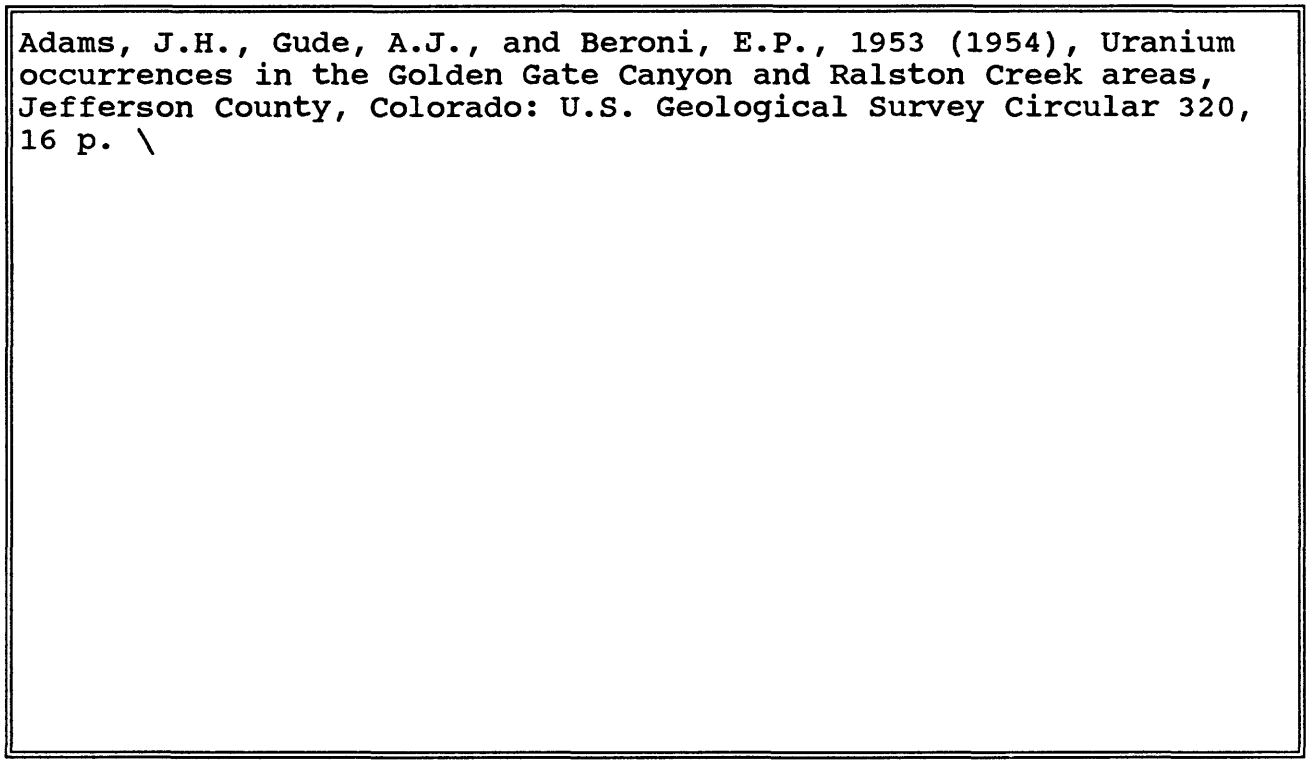
Option 3, DELETE AN ENTRY

Use Option 3 to delete a reference from the database. After selecting option 3, the prompt ENTER REF. NUMBER TO BE DELETED (0 TO EXIT): ? calls for entry of the number of the reference to be deleted. After entry of the number of the reference to be deleted, opportunity is provided to delete another reference:
DELETE ANOTHER (Y*/N)? Enter Y or hit the ENTER key to continue, or enter N to return to the Data Management Menu.

Option 4, EDIT AN ENTRY

Use this option, to edit a reference and to modify keywords for a reference. A prompt will call for entry of the Reference number to be edited.

ENTER REF. NUMBER TO EDIT (0) TO EXIT: After the number of the reference is entered the screen will have the configuration shown below, with the citation displayed inside an area defined by the double lines, as shown in this example.



Changes are made to the citation using the text editor. When revisions have been completed, and the display on the screen checked, the F10 key is used to record the changed reference in the data base. After the reference has been saved, the existing keywords for the reference will be displayed on the screen along with the prompt DO YOU WANT TO CHANGE KEYWORDS (Y/N*)? A Y response provides opportunity to re-enter keywords (the default is N). Entry of Y provides a list of the existing key words, and a prompt ENTER KEYWORD:

Enter each of the keywords for the reference in turn. If the keyword is not contained in the existing keyword file a prompt will ask, IS THIS A NEW KEYWORD?(Y/N*):

If you wish to add the word to the keyword file, enter N enter the keyword, and proceed.

Hitting the ENTER key in response to the ENTER KEYWORD prompt returns operation to the Data Management Menu.

Option 5, IMPORT A FILE CREATED BY A TEXT PROCESSOR

The text file used for data entry USING OPTION 5. must have two characteristics:

1. Each line must end with a carriage return except for document mode wordstar file.
2. Each bibliographic citation must be ended with a unique ASCII character that marks the end of the last line of the citation. This character must be immediately prior to the carriage return of the last line of the reference (an example might be ASCII character (92=\).

Some word processing programs such as Volkswriter create text files that are directly compatible. Volkswriter uses an ASCII character (020=¶) as a paragraph marker (to mark the end of a citation). Files created in document mode Wordstar can be used directly by inserting a \ character (ASCII 092) at the end of each citation (in this single case rule #1 above does not apply).

During data import references will be alphabetized, lines of text will be reformatted to 72 character length. Prompts will be:
ENTER FILENAME: Enter the complete name of the file containing the text (including extension).
ENTER STYLE OF INPUT (1 OR 2):

```
Example of Style #1
Obradovich, J.D., 1982, NDS 157; Albian, K-Ar/biotite-bentonite, Middle
West North American Basin, in Odin, G.S., ed., Numerical dating in
stratigraphy: John Wiley & Sons, p. 838-839. \
Example of Style #2
REFERENCE NUMBER    1636 CONTAINS    3 LINES OF TEXT  8 KEYWORDS
Obradovich, J.D., 1982, NDS 157; Albian, K-Ar/biotite-bentonite, Middle
West North American Basin, in Odin, G.S., ed., Numerical dating in
stratigraphy: John Wiley & Sons, p. 838-839.
chron       geol        mz        sw        K         bent
Ar          mica
```

If Style #1, a prompt will request:
ENTER ASCII CODE INDICATING END OF ENTRY

Example: if the character \=ASCII 92 has been used to mark the end of each reference, enter 92.

After this entry, a prompt will request entry:
WAS THIS FILE CREATED BY WORDSTAR? (Y/N*) : If the file was created using document mode Wordstar, answer Y, otherwise answer N. The next prompt asks about keyword entry (from the keyboard during the reading of the input file).
DO YOU WANT TO ENTER KEYWORDS NOW? (Y/N):

If you enter N the program will run and create the data base requested.

If you enter Y the program will start, but pause at the end of the first reference (marked by the chosen ASCII character), request entry of the key word(s) for the entry, then after appropriate entries to prompts ENTER KEYWORD, and a final response using the ENTER key, go on to succeeding entries until the ASCII file has been converted into a GSREF data base.

If Style #2, the program will run, create the data base, then return operations to the Data Management Menu.

Input from the file is added to the current data base.

Option 6, LIST KEYWORDS (SORTED)

Entry of 6 provides a list of keywords sorted in alphabetical order on the screen.

Option 7, EXPORT DATA BASE TO ASCII FILE

Use Option 7 from the Data Management Menu used to create an ASCII file from an entire data base. Such a file can be edited using the word processing program of choice for inclusion in a manuscript, or for return after editing to GSREF using one of the import data options. Deleted entries are not copied from the GSREF data base to the output ASCII file.

Prompts are similar those of Option 3 from the Main Menu; descriptions of entries are provided in a previous section.

ENTER OUTPUT FILENAME: ?
1 - PUBLICATION STYLE OUTPUT
2 - DATA BASE STYLE OUTPUT(INCLUDES REF# AND KEYWORDS)
ENTER CHOICE:?

ENTER SEQUENCE FOR OUTPUT
1=REF.NUMBER
2=ALPHABETIC
ENTER CHOICE ?

Choice #1 sends references to the file in the sequence entered in the file, #2 sends references to the file in alphabetical sequence.

Option 8, IMPORT A SORTED ASCII FILE

Use Option 8 from the Data Management Menu to import an ASCII file like that generated from a GSREF data base using the DATA BASE STYLE OUTPUT (type #2, using Option 8 from the Main Menu). Such a file (an example of the format is provided on p. 9) produces a data base with references in the sequence of the ASCII file, complete with the listed keywords.

The alphabetic sequence of references is not checked during creation of the GSREF data base. Like Option 5, keywords are read from the ASCII file.

Option 9, RETURN TO MAIN MENU

Entry of 9 or hitting the ENTER key returns operation to the Main Menu.

QUESTIONS ABOUT USING GSREF

How do I put data into a GSREF data base?

The most direct way to put data into a GSREF Data Base is to choose the first option Add an Entry from the Data Management Menu by typing a 1 followed by a carriage return. The program will request the data. You can enter less than the maximum number of 72 characters per line. When the citation is complete use the F10 key to record the citation in the data base.

As you respond to the questions for keywords, the program will check the value you type against the list of keywords previously designated for this data base. Those keywords it recognizes actuate a request for another keyword. Keywords that have not been used before will generate a question that asks if this is a new keyword value. The program has checked the value you typed against the current keyword list and it did not find a match. If you made a typing mistake, simply reply N followed by a carriage return; if it is a new value that should be entered on the list, respond with Y and a carriage return.

How do I use a file that I created using a word processing program ?

Create the text file in standard format. End each line with a carriage return and end each reference with a special character like \ that isn't used in the citation. Start the GSREF program, start a data base by using Option 1, Main Menu (type a 1 followed by the **ENTER** key, and follow prompts requesting the name of the data base. Change to the Data Base Management Menu by hitting the **ENTER** key, then invoke Option 5 Import a Text File by typing a 5 followed by the **ENTER** key. The program will request the filename of the text file. Enter the name and a carriage return. The program will then request the style of the input data. Type a 1 followed by a carriage return. The program will then request the ASCII value of the character marking the end of each reference. Volkswriter creates a file with paragraphs ended by the character ASCII 020=¶ and a carriage return. A prompt will ask if the file is a WORDSTAR file. If it was made using document mode WORDSTAR answer Y, if not enter N or hit the ENTER key. The program will then ask if you wish to enter keywords for each citation as they are read in and filed. Respond as you choose. If you say no (N), the program will proceed to file each of the citations with no further intervention. If you respond yes (Y), the program will allow you to enter up to twelve keywords for each citation and then file the citation. Operation will revert to the Data Management Menu when all of the citations have been added to the data base. For ASCII files such as those created using non-document mode WORDSTAR, end each reference with a character such as \=ASCII 92. For files created using other word processing programs, use text editing features in the file to make sure that each line ends with a carriage return and each reference with a special character.

But I use brand XYZ, and I don't know its file format, now what?

Many word processing programs provide for file conversion to ASCII or WORDSTAR format either as a part of the main program or as a utility program provided with the release, and there are commercially available programs that convert between many different word processing programs. We suggest that in case of doubt you convert files created in a different word processing program either to WORDSTAR or to ASCII format depending on your preference, then follow the rules for the corresponding data files. We don't know the file format for Brand XYZ either, but we'll bet a cup of coffee that the Brand XYZ folks can advise you how to convert the files to ASCII format for the price of a phone call.

When should I enter keywords?

Option 2 of the Data Base Management Menu allows you to enter new keyword values into the keyword file. You may prefer to enter all of the possible values into the keyword list prior to entering any citations. This will allow you to always regard the question of mismatching as a possible typographical error on input. When all of the keywords have been entered for a new reference, simply enter a carriage return to indicate the end of data for the keyword field.

The best method of retrieving data will vary with the circumstances; the program attempts to allow you maximum flexibility in that you can simply browse, you can be very specific (reference number) or you can use logic based on your knowledge of the subject matter stored in the data base to make sure that you get exactly those entries that you want. We strongly recommended that you spend some time simply playing with a small sample data base that contains a few entries and attempt the various types of retrieval to make sure that the data you enter in your final data base has the proper content and structure to permit you to retrieve it as anticipated. Retrieval by keyword and text in content utilize a process of specifying a selection criteria that involves one or more lines each containing three elements: a prefix, a test value and a connector separated by commas. The prefix has two possible values FOR to indicate a true test against the test value and NOT to indicate a false test against the test value. The test value is a string of characters separated by commas. It can consist of up to 12 characters for a keyword retrieval and up to 24 characters for a text in content retrieval If the string has a comma in it enclose the string between " (double quote) characters. The connector element allows you to connect lines logically. The values can be AND and OR. The AND connector means that the current line and the next line must both be true for a citation to be retrieved. The OR connector means that the current line (and possible other previous lines if AND was used previously) and the following line are independent and either being true will result in a citation being selected. The connector must be omitted on the last line since there will not be a succeeding line. Generally most retrievals can be done with a one or two line set of specifications; however, you can use up to 45 lines to specify the criteria. You must enter a final carriage return to signify that all of the criteria has been entered. The program will then display the criteria on the screen and request that you confirm that it is correct. Keep in mind that AND joins criteria and both must be true; OR separates the criteria and either can be true. If you are using the screen as the output device, GSREF will pause between retrieved entries to allow you time to read the citation and when you wish to proceed with the search, you must enter a carriage return to allow the program to continue the search. When you are through with the search enter a Q followed by a carriage return to return to the Main Menu.

Retrieval by browsing

The simplest way to retrieve data from a GSREF Data Base is to choose the BROWSE DATA BASE option from the Main Menu. This option allows you to browse through citations in the data base alphabetically. Each citation is brought to the screen first and then you can route it to the current output device in the current style of output. If you do not wish to send the citation to the output device, simply enter a carriage return. You are then asked whether you wish to move forward, backward or quit. If you wish to move forward, simply depress the carriage return (or type an F and a carriage return). To go backwards to the previous citation, enter a B and a carriage return. Assuming that you are not at the beginning or end of the data base (you cannot go past either end), the next citation will appear on the screen and you again start making choices about output, etc. To return to the Main Menu enter a Q in response to the direction question.

Retrieval by reference number

GSREF assigns a number to each citation as it is entered in the data base. If you remember the numbers of the entries, you can retrieve them by selecting the RETRIEVE BY REFERENCE NUMBER option from the Main Menu. You are then requested to enter an integer number followed by a carriage return. The citation will then appear on the screen and you can route it to the output device as in the browsing option (see above). When you have seen all the entries that you wish to examine, enter a carriage return (or a zero and a carriage return) to return to the Main Menu.

Retrieval by keyword

From the Main Menu you choose RETRIEVE BY KEYWORD by typing a 6 followed by a carriage return. You are then prompted by an example line that illustrates the format of each line of selection criteria to be entered. You should now enter the test criteria, line by line, ending each line with a carriage return. On the last line hit the ENTER key instead of typing a connector. The program will then display the search criteria on the screen. It reformats lines containing the connector OR so that the logic is more obvious. The program then asks you to verify that the criteria are correct. If so, depress the carriage return. If not, enter a N and a carriage return to restart search criteria input. When the entire file has been searched, the program returns to the Main Menu.

Retrieval by content of text

From the Main Menu choose RETRIEVE BY CONTENT by typing a 7 followed by a carriage return. You are then prompted by an example line that illustrates the format of each line of selection criteria to be entered. You should now enter the test criteria, line by line, ending each line with a carriage return. On the final line depress the carriage return instead of entering a connector to signify that you have finished entry of the search criteria. The program will then display the search criteria on the screen. It reformats lines containing the connector OR so that the logic is more obvious. The program then asks you to verify that the criteria are correct. If so, depress the carriage return. If not, enter a N and a carriage return to restart specification of search criteria. When the entire file has been searched operations return to the Main Menu.

What are the choices for output devices and styles?

GSREF allows you a choice of output to the screen, to a printer, or to a file, and two different styles of formatting the information sent to the output device. Information is sent to the screen when starting the program (the screen is the default "device"). The two styles of output are a publication format that includes only the lines of text for a citation, and a data base style where the reference number and key words are also included. You have the option of changing the output device and style from the Main Menu. You simply type a 3 and a carriage return and the program will request that you identify the desired output device by choosing from a three option menu by entering a number (1, 2 or 3) and a carriage return. You will then be asked to choose one of the two styles of format by typing a number (1 or 2) and a carriage return. The program then returns to the Main Menu.

How can I annotate a reference so that I can recover a key quote when I need it?

Each reference can use up to twenty lines of text. Few require more than three or four. The remaining lines can be used for annotations, quotations, or whatever. If the citation proper is ended by a carriage return, and the following line of text is started with the two characters /* (column 1 and 2) an annotation added to the reference field can be retrieved using the data base format but will be omitted from a listing in publication format.

How does one create new GSREF data bases from existing GSREF data bases (Version 4.0)

If you want to create a GSREF Data Base using a subset of the citations that are a part of an existing GSREF Data Base or from parts of several GSREF data bases, the procedure is as follows:

1. Open the existing data base using Option 2 from the Main Menu.
2. Use Option 3 from the Main Menu to reset output to a file in the format desired.
3. Use Options 4, 5, 6, or 7 from the Main Menu to send the desired output to the file.
4. Repeat the steps above using other data bases if required.
5. Start a new data base using Option 1 from the Main Menu
6. Change to the Data Management Menu (hit the Enter key)
7. Use Option 5 to import the file or files created above.

How does one convert a GSREF data base made using GSREF Version 3.1 to a data base for Version 4.0?

Start with GSREF Version 3.1. Send the entire data base to an ASCII file, see documentation Version 3.1 p. 7. This is done by using Option 7 Change/Device/Style to specify output to an ASCII file, choosing sorted (alphabetized) output, then using Option 3 to export the entire file.

This ASCII file is used by the program REF3TO4.EXE included on the Version 4.0 release disk to create a Version 4.0 data base. Start this program by typing REF3TO4, then follow the prompts.

How does one delete deleted references so that they don't take up space in the file ?

Use option 7 from the Data Management Menu to create an ASCII file in data base format. This file will not include deleted references. Then create a new data base, Option 1 from the Main Menu. Then use Option 8 IMPORT A SORTED ASCII FILE, Data Management Menu, and import the sorted ASCII file into the new data base. The new data base will contain the contents of the old without the deleted references. The count of references will be reduced by the number of deleted references. The numbers of the references higher the deleted reference(s) will be changed.

ACKNOWLEDGMENTS

The authors wish to express their gratitude to the following members of the U.S. Geological Survey, Edward du Bray and John Pallister for their numerous constructive comments concerning the essential capabilities of a minicomputer reference system and how such a system should operate, Mark Gettings who provided the original idea for such a system and for his assistance in the design of REFBIB, the system from which GSREF derives. The basic code for the text editor incorporated into this version of GSREF came from the publication by Craig (1988) listed below, and its use is gratefully acknowledged.

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FILES ON RELEASE DISK

```
GSREF.EXE      GSREF executable program
REF3TO4.EXE    Program to convert ASCII files generated by GSREF Version 3.1 to GSREF Version 4.0 data bases
COLORADO.NDX   Index file for a test data base named COLORADO
COLORADO.KEY   Keyword file for a test data base named COLORADO
COLORADO.REF   Main data file for a test data base named COLORADO
```

Data base COLORADO is provided so that those who wish to try GSREF can use some of the retrieval options without the investment in time needed to create a test data base. The key words in data base Colorado were chosen to demonstrate some of the ways of approaching the problem of designing keyword sets.

```
CAM      Cambrian
PC       Precambrian
KT       Cretaceous Tertiary
EXH      Exhalative mineral deposits
PEG      Pegmatite
CARB     Carbonatite
GMAP     Geologic map
RMAP     Radioactivity map
12000    Map at 1:12000 scale
6000     Map at 1:6000 scale
ALL      General references that may be desired in all retrievals
     (not used in combination with other keywords)
```

As an example of trial retrieval using Option 6 Main Menu, try entering these two lines (type each line followed by a carriage return), and follow the prompts:

```
FOR,EXH,OR
FOR,ALL,
```