AIPS Memo 88a

A User's Introduction to The AIPS Gripes Database

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Abstract

The AIPS Gripes database is an `emacs`-based tool for maintaining all of the many user complaints and suggestions received by the project over its lifetime. The present document is an in-depth introduction to the use of this tool. It does not address how the tool was constructed, nor does it address the contents of the gripes.

1 Introduction

The AIPS Gripes Database is built within the `emacs` editor. It is mentioned throughout this document that many of the editor's functions and key-bindings apply when moving through and editing forms within the database. Although it is *not* essential, it is recommended that you familiarize yourself somewhat with `emacs` before starting. Throughout this document you will encounter some keystroke shorthand. Some basic definitions are: `^ = CTRL = Control` key, `ESC = Escape` key, and `SPC = Space` bar. If you see something like ^*x*, this requires that you to hold down the `Control` key and hit the "*x*" key at the same time.

The database formerly resided on `baboon`, a Sun Unix-based Sparc station in Charlottesville. It now resides on `zia` a Solbourne workstation server at the Array Operations Center in Socorro. If you would like to use the database, you need only log onto virtual machine "`gripe`." If you are using an NRAO Unix machine, simply enter `rlogin zia -l gripe` at the Unix prompt. If you are logging in from outside NRAO, the complete rlogin address is `gripe.aoc.nrao.edu`. If for any reason this does not work, try to telnet to `gripe` with the command `telnet 146.88.1.4`. No username or password is necessary for any of these logins. The `viewgripe` procedure should start automatically and, when you exit the database, you should be logged out and returned to your own system.

After the viewgripe procedure finishes its initialization, the top level form of the database (the Selection/Options Form) should appear on your screen. Within this form you will specify the criteria by which a particular gripe or group of gripes will be selected.

2 Entering data and `emacs` functions

Many of the basic `emacs` functions will work when you are entering/editing data in the Selection/Options Form (as well as subsequent forms). "Arrow keys," if available, should work to move the cursor from character to character and line to line. Some of the other basic `emacs` functions are:

*TeXset and updated to 1994 by Eric W. Greisen.

`^f`	move forward one character
`^b`	move backward one character
`ESC-f`	move forward one word
`ESC-b`	move backward one word
`^p`	move up one line
`^n`	move down one line
`^a`	move to the beginning of the line
`^e`	move to the end of the line
`DEL`	delete the character to the left of the cursor
`^d`	delete the character which the cursor is on
`ESC-d`	delete one word to the right of the cursor
`^s`	search forward for a specified string
`^r`	search backward for a specified string
`SPC`	space one character
`RET`	completion of form — select gripes
`^x^c`	exit the database
`^g`	stop some action by the program

Many more functions are available and are defined within the various help screens found throughout the database (typically activated by entering " `?`," as you may notice in the menu line at the bottom of the screen). However, depending on your location in the database, some `emacs` functions (including some from the list above) may be disabled. For instance, no editing is allowed while you are viewing a `[read-only]` buffer of an individual gripe.

If you are at a prompt in the Selections/Options form which requires a fixed choice of entry (*i.e.*, `Status`, `Display`, etc.), hitting the `SPC` bar will show the possible entries. There is also the usual `emacs` completion function which will allow you to use the space bar to complete a string in such fields as long as a minimum number of characters has been entered to make the string unique. If there are several options for string completion, you will also be told the list of possibilities in a separate window. If there is ever any difficulty exiting/removing a second window, the sequence `^x-1` (`CTRL-x` and then the one key) should clear it. If there is not a preset list of options for an entry, entering a blank will simply insert a blank into the form. Note, blanks are not the same as no entry (all underscores).

3 The *AIPS* gripes selections/options form

The initial value of the Selection/Options form appears in Figure 1.

3.1 Retrieving gripes: selection criteria

The first step to retrieving gripes is to fill in the Selection Criteria section of the Selection/Options Form. Obviously, the more specific and complete the selection criteria are, the more likely you are to obtain a smaller group of gripes. At least one of the selection criteria: User, Status, Keyword, or Arbitrary string must be set. Be careful not to hit the `RETURN` key until the *entire* form is complete to your satisfaction. You do not need to fill the form in completely, but with fewer qualifiers, more gripes are likely to be selected. This could make locating a particular gripe more time consuming. If you wish to kill the retrieve process at any time during its execution, type ^g and you will be returned to the Selection/Options form.

Take care when entering the values in the Selection/Options screen. Although string searches are not case sensitive, they **are** sensitive to spelling and syntax. In other words, the spelling of your entries for `User`, `Keyword`, and `Arbitrary String in a Gripe` needs to be entered *exactly* as they appear in the gripes themselves. If a "griper" used an abbreviation or nickname when they entered a gripe, then you need to enter their name as such. If there are multiple spellings of their name in the database, only those gripes matching your entries will be pulled. (For the `Status` and `Display` options entries, however, there is a

```
                    AIPS Gripes Selection/options

 Selection criteria
     User (Joe Blow)              ______________________________
     Status (new, answer)         new________
     Keyword (MX, DBCON, tape)    _______________
     Beginning date (dd-mmm-yyyy) 01-Jan-93__
     Beginning Gripe no. (3456)   4900_
     Arbitrary string in a gripe  ___________________________________

 Options
     Display (index, full, exit)   index__
     E-Mail address (jblow@esu.edu)___________________________________
```

Figure 1: Selection/Options form

minimum-match entry capability.) Initials are completely ignored at this time, so it is unnecessary to enter them.

The selection criteria are discussed individually below.

`User`: is the name of the person entering the gripe. Initials are ignored, but the name must otherwise match the name signed to the gripe. There are no predefined values for this field and if left empty (all underscores) gripes entered by all users will be accepted.

`Status`: is assigned to each gripe to indicate the amount of processing that it has received inside the *AIPS* gripes system. If you are entering a gripe `Status`, there are four possible options from which to choose for gripes entered under this new database system: `new` gripes have no answer at all, `answer-new` gripes have been answered but the answers have not been sent to the persons who wrote them, `answer-sent` gripes have been answered *and* sent, and finally `answer` gripes are *all* gripes which have been answered, whether they have been sent or not.

In addition to the statuses just mentioned, answered gripes prior to about number 4563 (those entered before about the second week of November, 1990) may also be marked simply as `answered`. These will have already been sent to the users, but you must keep this difference in mind when selecting a group of gripes which may include some entered before `and` after the transition to the current database system. Thus, it may be necessary to run your query twice — once for each "epoch" of entries.

Note that if `Status` is not entered (left all underscores), gripes with *any* status will be accepted.

`Keyword`: is the classification or classifications assigned to most gripes. This is frequently the name of the task or verb involved but may include other items. If `keyword` is not entered (left all underscores), gripes with any keyword will be accepted.

`Beginning date`: is a date entered in the form dd-mmm-yy (*e.g.*, 01-Jan-90) to select only gripes entered after the given date. If no date is entered, gripes with any entry date are accepted.

`Beginning Gripe no.`: sets the lowest gripe number which will be selected. Each Gripe is given a unique number more-or-less in the order they were entered. Selection by gripe number is faster than selection by date. If no gripe number is entered then any gripe number is accepted.

`Arbitrary string in a gripe`: allows selection by the presence of an arbitrary string of up to 35 characters within the gripe. One letter "words" and numbers are ignored. The target string can be anywhere in a gripe file, *e.g.*, this is useful if you don't know a user's first name.

3.2 Retrieving gripes: display options

Once you are satisfied that the Selection Criteria section of the Selection/Options form is complete, enter the Display Option(s) by which you wish to view data on the gripe(s). As is explained in the help screen, you may:

(a) Enter `index` to view a simple index of the selected gripes,

(b) Enter `full` to skip the index and view a "slide show" showing the full text of *all* selected gripes,

(c) Enter `print` to either print the selected gripes on the NRAO laser printer or write the output to a file (`/tmp/gripestoprint`) (you will be prompted for your choice),

(d) Enter `one` to view the (one) gripe whose number was specified in the `Beginning Gripe Number`, or

(e) Enter `exit` to exit the program.

A valid Display option must be given.

If you think you might like a copy of any of the gripes which will be displayed, enter your e-mail address at the E-Mail Address Options prompt at the bottom of the form. You may send these gripes to *any* valid e-mail address which is supported through NRAO networks.

4 Retrieving a gripe index

Unless you know that your query will return only a handful of gripes, it would probably be best to start by viewing an index of your selection of gripes. After entering `index` at the Display prompt, pressing `RETURN` will display a concise list (ordered by gripe number) of the gripes which match the criteria you selected. Key properties of each gripe will be displayed along with a one-line summary of the gripe itself. The help screen (called by entering a `?`) for the index should cover the basics of cursor movement and individual gripe selection. Most `emacs` functions still apply. (If you need additional explanation of key bindings, etc., `ESC-x Helper-help` or `ESC-x Helper-describe-bindings` should help. These are usually available at any point in the database.) A sample Gripe index is shown in Figure 2.

4.1 Viewing specific gripes

From the index form, you are allowed to move the cursor to any gripe in the index and view its full content by hitting the `RETURN` key. You may then scroll through successive gripes (`SPC` bar) or previous ones (`P`) or return to the index listing (`q`). Again, entering a `?` will give additional help for active functions within the gripe screen. Once a Gripe appears on the screen, you can obtain a copy of it by e-mail by entering a lowercase `m`. If you did not give an e-mail address in the Selection/Options form, you will be prompted for one at this point. If you are using an NRAO machine in Socorro, NM, entering an uppercase `L` will spool this information to the laser printer. Entering `q` successively will bring you back out of the database to the Selection/ Options form. A sample Gripe (the first one in the Gripe index) is shown in Figure 3.

4.2 Retrieving information on the gripers from the index

If you wish additional information on the person responsible for a particular gripe, move the cursor to that gripe number and enter a lowercase `a`. This will give the "griper's" address(es), phone number(s), user number, etc. If you want information about any *other* person in the address database, entering a lowercase `l` anywhere in the Gripe Index form will yield a prompt for `Name:` at the command line. Enter a name (syntax and spelling sensitive) to retrieve said information. Once the User Information form appears on the screen, you can obtain a copy of it by e-mail by entering a lowercase `m`. If you did not give an e-mail address in the

```
                    AIPS Gripe index

 No.   User              Date          Status      Keyword(s)
4092 Alan Bridle        08-MAR-1990  NEW         EXTLIST
    Want option to list only a single file.
4093 Alan Bridle        09-MAR-1990  NEW         VTESS
    VTESS writes wrong map type in header
4142 Alan Bridle        23-MAR-1990  NEW         TVLOD
    Failed on IVAS
4152 Alan Bridle        26-MAR-1990  NEW          PRTTP
     PRTTP bombed
4153 Alan Bridle        26-MAR-1990  NEW          Output file names
    Why both OUTPRINT and OUTFILE
4204 Alan Bridle        19-APR-1990  NEW          SL2PL
    Slice plots go offscale
4205 Alan Bridle        19-APR-1990  NEW          SLCOL
     SLCOL doesn't collate slices
4216 Alan Bridle        23-APR-1990  NEW          UVMAP
     UVMAP should work for packed data.
4217 Alan Bridle        23-APR-1990  NEW         EXTLIST
    Needs a page formatter
4218 Alan Bridle        23-APR-1990  NEW          SL2PL
    SL2PL is dying with a floating point exception
4219 Alan Bridle        23-APR-1990  NEW         SL2PL
    SL2PL making plots that kill QMSPL and TVPL
4220 Alan Bridle        25-APR-1990  NEW         pointless warnings
     Get rid of the non-standard program messages
```

Figure 2: Sample gripe index

Selection/Options form, you will be prompted for one at this point. If you are using an NRAO machine in Socorro, NM, entering an uppercase `L` will spool this information to the laser printer. To return to the gripe index, type a lowercase `q`. A sample user information file is shown in Figure 4.

5 Viewing all selected gripes

If you want to skip the gripe index and simply review the entire contents of *all* gripes selected, you should enter `full` at the Display Options prompt of the Selection/Options form. The first gripe in the selected list will appear in its entirety. Again, this is read-only, and thus you are only allowed to use the `emacs` functions and key-bindings which can move the cursor and string-search through the gripes. You can only page through each gripe one at a time. When you have exhausted the list, you will be returned to the Selection/Options form. Again, additional help can be obtained at any point by typing `?`, `ESC-x Helper-help`, or `ESC-x Helper-describe-bindings`. Entering `q` will bring you back to the Selection/Options form.

6 Database support/assistance

This concludes the documentation for use of the *AIPS* Gripes Database. If there are any problems with the system or in your understanding of how to use it, please contact the database manager (Gustaaf van Moorsel) at the National Radio Astronomy Observatory at (505)835–7396 or send an e-mail message to

```
                     AIPS Gripe report _GRIPE-NO: 4092

_GRIPE-ENTERED: 08-MAR-1990 12:13:09   _SYSTEM: NRAO1 Convex C1 7.1
_STATUS: NEW   _KEYWORD: EXTLIST
_ONE-LINE: Want option to list only a single file.
_USER: Alan Bridle   _USER-NUMBER: 76   _AIPS-RELEASE:  15JUL90

_GRIPE: It would be nice if EXTLIST had an option to list data only for the
extension version nominated by INVERS, rather than for INVERS plus all
higher version numbers, as it is now.  An example is the application
in which you have made many slice files (\eg\ 100) and wish to extract
the parameters of, say the ninth.  The present input structure allows
you to suppress the unwanted data for the first eight, but EXTLI then
insists on telling you about the last ninety!  Would it be more
logical for INVERS to specify the ONLY version number to be reported,
rather than the FIRST one, as now?


_ANSWERED-BY:     _ANSWER-DATE:
_ANSWER:
```

Figure 3: Sample gripe file

```
                 AIPS User Information  _USER-NUMBER: 76

_USER: Alan Bridle
_ADDRESS: NRAO
 Edgemont Road
 Charlottesville, VA 22903
_PHONE: (804) 296-0375
_EMAIL: abridle@nrao.edu
```

Figure 4: Sample user information file

`gvanmoor@nrao.edu`. We also welcome any suggestions for improving the performance or configuration of this database. If there are any features which you would like to see added to this system, please let us know.

AIPS Memo 88b

A Programmer's Guide to The *AIPS* Gripes Database

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20 February 1992

Abstract

The *AIPS* Gripes database is an `emacs`-based tool for maintaining all of the many user complaints and suggestions received by the project over its lifetime. The present document is an in-depth guide for programmers and the Gripe Manager to maintain the Gripes Database and to maintain the database tools. It assumes a working knowledge of the User's Introduction to the *AIPS* Gripes Database and of `emacs`.

7 Introduction

The *AIPS* Gripes Database is built within the `emacs` editor using the `lq--text` string search system to aid in the selection of files. Most of the functions are implemented as `emacs` Lisp routines with `lq--text` routines being invoked as subprocesses to `emacs`. The two purposes of this document are (1) to describe how to enter new gripes, modify or answer gripes and the distribution of gripes and (2) to document the software system used for the Gripes system.

8 Access to the gripes database

Programmer/Gripe manager access to the gripes database is through the account (username) `aipgripe` on `zia`. (If you wish only to *use* the database (read-only privilege), you may also log into virtual machine `gripe`.) The gripes database system is started using the procedure `viewgripe`. Programmers/Gripes Managers then have the full user functionality available, as well as a variety of management tools which are not documented in the on-line on-line help and are only available when logged into account `aipgripe`.

9 Structure of the database

The Gripes database system consists of a number of parts: the text of the gripes, user address information, and `lq--text` information for both of these types of information. The gripe and user information is kept in a collection of files, one per gripe or user. These files consist of coded keywords, starting with _ (underscore) and ending with : (colon) and containing only upper-case letters and - (minus). This allows these files to be decomposed into a list of keyword-value pairs which can then be manipulated by lisp functions. Gripe

[1] TEXset and updated to 1994 by Eric W. Greisen.

files have names of the form `gripe`*xxxx*`.grp` where *xxxx* is the gripe number and live in `~aipgripe/gripe` or `~gripe/gripe`, or `/aips1/gripe/gripe`. User information files have names of the form *username*`.info` and live in `~gripe/adr`. `Lq-text` files for rapid searches of either of these databases are kept in `~gripe/gripedir` and `~gripe/adrdir` for gripes and user information, respectively.

10 Entering new gripes

Gripes may be entered into this system through three possible routes: conversion of old TEX-format gripes, conversion of new *AIPS* `GR` files, or by interactively entering new gripes in `viewgripe`. Each of these are executed using lisp functions in `~gripe/lisp/newgripes.el` which is set to auto load. Since the inclusion of a new gripe involves assigning a new, unique gripe number (using function gripe-number), no other routes are allowed. (Most of the gripes lisp functions have documentation available through the `emacs describe-function` feature.) The functions for entering new gripes are described in the following:

(A) The function `convert-texgripes` reads the older TEX-based gripe files (`GZ`, `GX`, `GS`, and `GT` files — harvested and typeset) and extracts gripes and user information and enters them into the new system. A user information file will only be added (created) if none exists for a given user and will need to be edited to put needed linefeeds into the addresses. To use this function, open a window on the input file (`^x-4 ^f`, then enter the name of the file — default location `/aips1/gripe`), position to the top of the file and execute `convert-texgripes` (`ESC-x convert-texgripes`). The routine should run to completion with the gripe and user files added.

(B) The function `convert-AIPS-gripes` reads the *AIPS* binary gripe (`GR`) files and extracts the gripes and corresponding user information and enters them as individual files in the new system. A user information file will only be added if none exists for the user and will need to be edited to put needed linefeeds into the addresses. To use this function, open a window on the input file (`^x-4 ^f`, then enter the name of the file — default location `/aips1/gripe`), position to the top of the file and execute `convert-AIPS-gripes` (`ESC-x convert-AIPS-gripes`).

(C) The function `init-gripe-form` allows interactive input of a gripe. First, it initializes a new buffer containing a "fill-in the blanks" form and automatically assigns a new gripe number and the current date and time to it. To use this function, hit `ESC-x init-gripe-form`. The buffer is then edited and saved with a `^X^S` — this will correct the status if an answer is given and cause the `lq--text` files to be updated. If you wish to stop and return to the Selection/Options form, `^x-b AIPS-GRIPE` will switch buffers. Other buffer-switch options can be displayed by hitting `^x-b ?`.

(D) The function `init-user-info` allows input/editing of user information files. It will first prompt you for a user name and, if there is no information for that user, a new buffer is initialized for interactively entering the data. If an information file for the named user already exists, this file is displayed in a window for possible editing. A user information file may have multiple aliases by using several `_USER:` name pairs. An important point to remember when entering an address is that each line after the first should begin with a blank space. This will assure correct pagination when printing the mailing labels. The user information files are then saved with a `^X^S` command, which will also update the `lq--text` files. Again, `^x-b SPC` will show you all possible buffers to which you can switch.

11 Managing `lq-text` files

When gripe or user information files are updated they are re-indexed automatically in the `lq--text` system. In addition, there is the function `rebuild-lqtext` to re-build the `lq--text` system. This should be run occasionally to insure that the files are up to date. `rebuild-lqtext` will prompt for the file type to be rebuilt; answer `gripe` for gripes and `adr` for user information files.

12 Editing existing gripes/user information files

If a large number of gripes need editing, such as when assigning keywords to new gripes, use Display option `edit` in the main menu of `viewgripe`. Each of the selected gripes will be displayed in gripe number order in a window for editing. The files can be saved and indexed using the `^X^S` command. The command `ESC ^C` will then advance to the next gripe. Selecting by status `new` and a beginning gripe number is usually appropriate.

Gripes or user information files, displayed in any of the ways described in the user documentation, can be switched to edit mode by typing a lower case `e` when the cursor is in the window. This file can then be saved and indexed using `^X^S` and the edit terminated with `ESC ^C`. The status of any gripe being given an answer will automatically be updated.

12.1 A few words about gripe selection

In order to accomodate this new gripe system, slight modifications have been made to "pre-database" gripes. One important modification is the status of the gripes. Answered gripes prior to about #4563 (those entered before about the second week of November, 1990) will have a status of `answered`, as opposed to `answer`, `answer-new`, or `answer-sent`. You must keep this in mind, particularly when selecting a group of gripes which may have had some entered before *and* after the transition to the current database system. Thus, it may be necessary to run your query twice — once for each "epoch" of entries.

If, at any time, you wish to select only one gripe, you may do so by first entering the number of that gripe at the `Beginning Gripe Number` prompt of the Selection/Options form and then entering `one` at the `Display Options` prompt. This will quickly display the specified gripe.

12.2 A word about printing gripes

If, at any time, you wish to obtain a hardcopy of a gripe (or gripes), selecting the `print` option from the Selection/Options form will invoke a prompt as to whether to send the output to a printer or to write it to a file. If the `file` option is selected, the output is written in file `/tmp/gripestoprint`. Any answer other than `file` will be taken as `printer`. You will note that `one` and `print` cannot be selected simultaneously. Therefore, if you wish to print only one gripe, your other selection criteria must be sufficiently unique such that only one will actually be selected by it. We recommend using the `Arbitrary String in Gripe` where possible.

13 Answering gripes

To insert an answer to a gripe, first select the appropriate gripe(s) in an index display and then display the gripe to be answered. Typing a lower case `e` will switch to `edit` mode. Enter your name as the person responsible for the answer, the current date, and the answer in the appropriate places in the form. A `^x^s` will then automatically correct the status, save the file, and re-index it in the `lq--text` system. At this point it would be friendly to mail the griper the answered gripe. There are two ways to do this. From the edit mode, you can immediately send the gripe to the user (or to any e-mail address) by hitting `ESC-x mail-user-answer` (you will be always be prompted for a valid address and also a return address in case the mail message bounces). The subject heading for the mail message will read `Response to AIP Gripe`. If, within the editor, you need to verify an address, you may use the lookup utility by hitting `ESC-x lookup-user`.

You can also mail a gripe from outside the editor by first returning to the gripe index with `ESC^c`. If you don't know the e-mail address you can look it up by typing a lower case `a` at this point. Then re-select the gripe by hitting `RETURN`. At this stage, a lower case `m` will cause the gripe to be mailed, prompting you for an address. (Note: this assumes that you did not enter an e-mail address on the top level form. If you did, then the gripe file will be mailed to the address entered in the form and you will not be asked for the address.)

14 Sending answered gripes

If you would like to prepare the selected gripes for mailing, you should enter `send` at the Display Options prompt of the Selection/Options form. The `Status` in the Selection Criteria section of the Selection/Options form should also be filled out as `answer-new` (*i.e.*, gripe answered but not yet sent). The procedure called by this entry will make two files with the selection criteria you specified: one is a file containing the gripes which have been filtered for printing and mailing (`/tmp/gripestomail`), and the other is a file containing the corresponding gripers' addresses in a form suitable for printing labels on the line printer (`/tmp/gripeaddresses`). This procedure will also change the status of these gripes from `answer-new` to `answer-sent`. Once the `send` option has been run from the Selection/Options form, it cannot be run from there again, whether or not you restart `viewgripe`, since the contents of the gripe files will have been changed.

If something goes wrong with the above procedure and you need to make the gripe print and address files over again, exit `viewgripe` and restart it. When the Selection/Options form appears, issue the command `sendgripes` (invoked with `ESC-x sendgripes`). This procedure will recognize that its input list (`gripe-by-user`) is empty and will recover the list it last used from file `savegripelist` which lives in the `gripe` directory.

15 Buffers used by the gripe system

There are a number of buffers used in the `viewgripe` system whose names don't usually appear in the mode line. It is frequently desirable to switch to one one these buffers when something goes wrong. (The `switch-to-buffer` command is invoked by `^X-b` with name completion supported). These buffers are:

`AIPS-GRIPE` — buffer contains the main Selections/Options form. Hitting `RETURN` will invoke whatever function is selected on the form.

`GRIPE-INDEX` — buffer contains the index of selected gripes and is usually created even if it is not displayed. The usual functions can be invoked when visiting this buffer.

`LQTEXT-ERROR` — buffer will contain any messages, usually error and warning messages, resulting from running `lq--text` in a subprocess. If something goes wrong at this stage the usual symptom is the claim of `No gripes selected`. A more accurate report may be found in this buffer.

16 Files used by the gripe system

The *AIPS* gripe manipulation system is based on the `lq-text` system to select files and lisp programs running in `emacs` to manipulate the gripes. In addition to the gripes, a database of user address information is also maintained. There are several directories in this system:

`~gripe/bin` contains shell scripts to interact with `lq--text`.

`~gripe/lisp` contains the lisp source code.

`~gripe/gripe` contains the current gripe files, one gripe per file with names of the form `gripe`*gripe_no*`.grp`.

`~gripe/gripedir` contains the files that `lq--text` needs for the gripes.

~gripe/adr contains the user information in files with names of the form *user_name*.info. Aliases are allowed inside the file and lq--text is used to actually find the correct file.

~gripe/adrdir contains the files that lq--text needs for the user information.

There are three kinds of program files needed for this system: emacs lisp programs (names ending in .el), shell scripts, and a few miscellaneous ones (named below with the full path). They are:

gripeinit.el is the file that is run when the viewgripe script is executed. It loads the necessary files and brings up the selection menu. Sets up to auto load sendgripes and init-gripe-form.

gripeutil.el contains a number of utility routines. The main command of interest to programmers and the gripes manager is rebuild-lqtext which re-builds a set of lq--text files.

mfe.el contains the form fill-out package.

newgripes.el contains programs to enter new gripes into the system. They are init-gripe-form to initialize a buffer for a new gripe; init-user-info to initialize a user info file; convert-texgripes to convert old TEX gripes; and convert-AIPS-gripes to convert *AIPS* binary gripe files.

viewgripe.el contains programs to access and manipulate the gripes, both for user read-only access and programmer/gripe manager access. Function view-gripe is the top level routine.

sendgripes.el contains programs to prepare files for the distribution of answered gripes and to update the gripe file to indicate this. Function sendgripes is the top level routine.

aipsconsult.el This program runs the "on-line" consultant routine for those programmers who need "psychiatric" help after using *AIPS* or the Gripes Database.

viewgripe script to set environment variables for the gripe and user information files and to start up emacs loading the appropriate files.

lqmerge script to select a list of gripe files which contain a list of given phrases. Output is to a file named in the call sequence.

adrfind script to find the user information file containing a specified string.

upgripe script to re-index a gripe file in the LQ text system.

upadr script to re-index a user information file in the LQ text system.

rebuild script to perform tasks of both the upgripe and upadr scripts in a batch-like mode. It can be set to run automatically at regular intervals to keep the gripe and user information files current.

~gripe/gripe/nextnumber contains the next gripe number to be assigned. It is maintained by function gripe-number (in gripeutil.el).

~gripe/gripe/savegripelist contains the last gripe-by-user list sent to sendgripe. This is kept for error recovery purposes.

~gripe/Remote_user is the shell remote users (user gripe) get when they login. It prompts for a terminal type (with a default) traps some errors and starts up viewgripe.

17 Database support/assistance

This concludes the documentation for programers' use of the *AIPS* Gripes Database. If there are any problems with the system or in your understanding of how to use it, please contact the database manager (Gustaaf van Moorsel) at the National Radio Astronomy Observatory at (505)835–7396 or send an e-mail message to gvanmoor@nrao.edu. We also welcome any suggestions for improving the performance or configuration of this database. If there are any features which you would like to see added to this system, please let us know.

18 Harvesting gripes[2]

18.1 Gather.GetMany

Gather.GetMany is a shell script to gather binary gripe AIPS GR files from a collection of machines available over the network. Because the shell script relies on the remote machine having the "remote shell" (rsh) command, it will only work on Unix machines.

A simple file, Gather.Hosts, controls where Gather.GetMany will look for gripes. Each line of the file contains three fields separated by spaces. First the name of the machine, next the name of an account with privilege to read/write the GR files, and third the path to the GR file. Additionally, any line beginning with a # sign in the first column is a comment and is otherwise ignored. A sample Gather.Hosts file is:

```
# Comments have to start in the first column with a # sign
# Format is:
#Site               via HOST         account    path to DA00
#
CVILLE-SUNS    baboon.cv.nrao.edu    aipgripe   /AIPS/DA00/BABOON
NRAO1          baboon.cv.nrao.edu    aipgripe   /nrao1/aips/code/DA00/NRAO1
AOC-SUNS       aguila.aoc.nrao.edu   aipsmgr    /AIPS/DA00/AGUILA
AOC-CONVEXES   aquila.aoc.nrao.edu   aipsmgr    /yucca/AIPS/DA00/YUCCA
AOC-IBMS       zuni.aoc.nrao.edu     aipsmgr    /AIPS/DA00/ZUNI
```

Each machine listed in Gather.Hosts needs to permit the person running Gather.GetMany to use rsh as the appropriate user (see man rhosts). For instance, suppose Gather.GetMany is being run as user aipgripe on machine baboon. Then the file .rhosts in the home directories of aipgripe on baboon, and of aipsmgr on aguila should contain the lines

```
baboon.cv.nrao.edu aipgripe
baboon aipgripe
baboon.cv.nrao.edu aipsmgr
baboon aipsmgr
```

There must be a "dummy" GR file that contains no gripes. This is used to reset the gripes file to none by copying over the original GR file. If the GR file is named GRC00000;1, then the dummy GR file should be named GRCdummy;1. (If the format "version" of the files changes in a future release of AIPS, the C will become D, then E etc. Gather.GetMany is smart enough to do the right thing until we get past Z and this will probably never happen.)

The script Gather.GetMany uses the script Gather.GetOne to get gripes from one site. When run, Gather.GetOne will concatenate all the remote GR files it can get in the file GRCremote (or GRDremote etc). Because Gather.GetOne always appends, you must remove the GRCremote file once the gripes in it are entered into the gripes system. As it runs, Gather.GetOne will write progress messages on the terminal. It will also put the messages into a log file called Gather.Log.

Conditions that Gather.GetMany tries to notice and report include:

```
     Machine or network down
     No gripes entered on this host
  *  No GR files on host
  *  No ''dummy'' file on host
     Copy fails
  *  Concatenate fails (out of local disk?)
```

The items marked with * indicate something that needs to be looked into; everything else is normal if it doesn't persist.

[2] This section was written by Brian Glendenning 1990 Dec 12 and revised by Glen Langston on 1992 May 04.

18.2 Contents of a raw gripe

The **GRCremote** file contains many invalid characters as well as valid gripes. Each Gripe is composed of 10 pieces, and each piece is contained between an pair of curly brackets ("{" and "}"). It is critical for the Gripe harvesting that there are *exactly 10 pairs of curly brackets, and that the correct information is entered in its respective set of brackets.* What should appear in the ten (10) required sets of brackets is:

```
 1.   {date and time}
 2.   {computer}
 3.   {user# and version of AIPS}
 4.   {username}
 5.   {user address}
 6.   {user phone}
 7.   {gripe}
 8.   {one-line description of gripe}
 9.   {user e-mail address}
10.   {I have NO IDEA what goes here}
```

18.3 Adding GRCremote to the database

After harvesting the gripes, several steps remain before the gripe is sitting happily in the gripes database.

1. Edit the **GRCremote** file to remove the extraneous characters (mostly `^@`s and `^M`s).

2. Then start up the gripes database as user **aipgripe** using **viewgripe** as described above.

3. Bring the new **GRCremote** file in by typing the control sequence `^X4^F` (which will ask for the name of a file to edit) and then the full name of the file. It will appear in one of the **emacs** windows.

4. Move into the file and type the control sequence `ESC-x convert-AIPS-gripes`. **emacs** will say something about editing files in the background.

5. Leave the **GRCremote** file by typing the control sequence `^XO`.

6. Look at the list of new gripes with the gripes data-base command **index**.

[3] the answer to the gripe, dummy