

UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

authorization: Director of the Centre

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2 EQUIPMENT REORGANIZATION

On the weekend of 20-21 August, the computer room is to be reorganized to prepare space for the new equipment. Therefore, the Centre will be closed for business on SUNDAY 21 AUGUST and if problems are encountered, it may be necessary to carry over this reorganization period to Monday 22 August.

3 A REMINDER ON SECURITY (see N-215)

We remind you that the security of your account is largely in your hands.

- * Change your password frequently
- * Protect sensitive files

4 SOFTWARE STATUS

STATUS is a new program that provides brief reports of any changes recently made to System Software by the System Librarian. It will also provide notice of any problems or bugs made known to the Librarian.

.R STATUS

- * ← enter any file name e.g. "FOROTS" to obtain any specific reports;
- *<cr> will type the complete file

The STATUS report is brief but will direct the enquirer to sources of more detailed information where possible.

5 SORT-10 VERSION 3A

SORT-10 Version 3A is now available on NEW: This release is primarily for maintenance purposes but includes some new facilities, in particular

- it is callable from Fortran and Cobol programs
- it handles Fortran Binary files
- it handles EBCDIC records

For further information use HELP SRT3A.

6 F10 AND FOROTS VERSION 5

These versions, which are primarily maintenance releases, have been put on NEW:. The files DOC:FTN5.DOC and DOC:FRS5.DOC are the standard supporting documentation files. In particular, this version purports to fix up a reported error where wrong code was generated for expressions involving exponentiation of a common sub-expression which included a - sign, e.g.

$$(1-X)**3 + 2.0*(1-X)**5$$

An important addition to this system is the addition of ERR= to Open and Close statements and the creation of an ERRSNS routine which may be called after I/O operations to determine the status of the last operation. This extension is compatible with the proposed ANSI 76 Fortran standard but additional information is available - for further details, see FTN5.DOC. One particular aspect which may affect existing programs which use ERR= in an input

statement is that Forots will now attempt to leave its status such that the operation which caused the error may be repeated; with the exception that for sequential input operations, only the last record may be re-input. It can be seen that this will require some examination of usage in this area but it does provide for more effective error processing without REREAD which has always been error-prone.

7 F10 COMPILER

A user reports that he has conducted comparative tests on the cost of the F40 and F10 compilers over a range of programs. His conclusion is that F10 is certainly no worse than F40 and often is better. There has been a thought that F10 was slower and more expensive, partly because it has a number of segments, whereas F40 is a single segment. We would be pleased to have comments from other users.

8 AUTOMATIC INTERACTION DETECTOR (AID10)

The Centre has recently acquired, from the University of Pittsburgh, a DECsystem-10 conversion of the program known as AID. The methodology and purpose of the program are briefly outlined below. For further information on control card setup and the use of the program, intending users should consult the help file, copies of which may be obtained thus -

```
.PRINT HLP:AID10.HLP
```

AID10 is a step-wise variance analysis program which examines the interactions of a set of predictor variables and one dependent variable by successive applications of one-way analysis of variance. Variables whose values are qualitative (e.g. marital status) as well as those whose values are quantitative (e.g. income) may be included in an AID10 run.

AID10 contains options for weighting observations, screening observations from an analysis and saving residuals on file. The recoding structure for variables provides for classification into discrete values and intervals of mixed lengths.

AID10 is designed to assist the researcher in selecting from his data sample those combinations of variables which are most related to the phenomenon he is studying. To do this, it employs a non-symmetrical branching process based on the significance tests of one way analysis of variance.

The program analyses the interactions of one dependent variable with a set of predictor variables. It then splits the sample into two mutually exclusive groups of observations. The split is made on the predictor variable which will minimize the within-group sum of squared deviations (WGSSD) for the dependent variable. Having made this split, the program examines all eligible unsplit groups and attempts to split that one with the largest WGSSD for the dependent variable. The technique is applied iteratively until a 'tree structure' of final groups, which satisfy user specified criteria, is generated.

9 XTEC

XTEC is a super set of TECO. It is described in the file DOC:XTEC.MAN. TECO users should note that the "Y" command no longer exists (except within macros) since it has been replaced by the "EY" command.

The "EH" value is set from the users watch bits (set by the /MESSAGE switch to LOGIN). The XTEC line in SWITCH.INI is read and executed as a macro by XTEC on start-up.

This version differs from the version in the DECUS library in that the log file (if it exists) is checkpointed every block. This means that in the event of a system crash the log file should contain as many full blocks as were written.

XTEC may be run by the command R UTI:XTEC

10 MONECS SCHEDULE

The times for Monecs running for second semester are:

GRIFFITH	1100 - 1300	
	1400 - 1430	
COMMERCE	1100 - 1300	
	1500 - 1700	
HAWKEN	0830 - 1000	(Fortran only)
	1300 - 1430	
	1600 - 1730	
	plus overnight run.	

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