UNIVERSITY OF QUEENSLAND

Computer Centre

NEWSLETTER

authorization: Director of the Computer Centre

1   STATISTICAL PACKAGES MANUAL

Users of SPSS and other statistical packages will be pleased to know
that the Centre is currently developing a manual oriented towards
U.Q. facilities and use.   It is hoped to circulate a draft of the
manual to selected users by end of November and have the manual
available for general distribution at the beginning of 1975.

1.1   SPSS Users

All sets of data for SPSS and similar standard programs over a few
hundred cards in length should be immediately copied to disk before
being input to the standard program.   This removes the need for
feeding boxes of cards through the card reader each time an error
occurs.   Use the following cards:

```
$SEQUENCE
$JOB - - - -
$DECK filename.DAT

      .
      .      data cards
      .

$EOD
.COPY   = filename.DAT(A)          see 1.4 below
$EOJ
```

and refer to this file in the SPSS commands by using:

INPUT MEDIUM   filename.DAT

1.2   The possibility of error termination of a program increases
markedly with the length of the run being undertaken.   This is true
even of relatively error free programs like SPSS where the length of
the run is determined by the amount of data being used or the number
of variables being analysed.   When using new procedures or options
TEST EACH RUN FIRST with a small amount of data to avoid wasting
both time and money.   When attempting a large run check both the
cost limit and the time limit.   The default time limit of 5 minutes
will generally be exceeded for large SPSS runs.

To set a higher time limit use the /TIME:hh:mm:ss on the $JOB card. (hh,mm,ss are hours,minutes and seconds respectively).

Use: .R SPSS
              *commandfile.ext
              .IF (ERROR).CLOSE

at all times to ensure the printing of all output up to the time of the error.

Generally a number of small runs are better than one large run as there is less chance of error in a small run. Also using a number of separate procedures is better than specifying a lot of analyses on one procedure card since there is a limit to the amount of memory allocated to each procedure.

1.3   Lineblock both the data file and the SPSS command file using .COPY = filename.ext (A). This is required by SPSS and will cause the incorrect reading of data if omitted. It is not required for NEW:SPSS.

1.4   Confusion exists regarding the use of filename extensions in SPSS. Both the input command file and the SPSS system file generated by a SAVE FILE command take .SPS as default extension. Using the same filename (with no extension) for both the command file and the system file can cause the overwriting of the command file. To avoid confusion either use different filenames for command and system files or give explicit extensions in both cases.

1.5   Users are reminded that SPSS expects all numbers input to be in floating-point format. Therefore I format should not be used. (Use of I format is likely to result in all data being regarded as zero.)

Contrary to the manual, the default value of SPACE for NEW:SPSS-10 is 1,500 WORDS. For factor analysis involving more than about 15 variables a larger value of SPACE will be required. The value of SPACE may be set by means of the switch "/SPACE:n" appended to the end of the command string.

      example: .R NEW:SPSS
                      *CONTRL.SPS/SPACE:9K

will set SPACE to be 9000 WORDS.

1.7   The recommended deck setup for running SPSS with both commands and data on cards is as follows:

```
$SEQUENCE
$JOB - - - -
$DATA
RUN NAME - - - -      )
    .                 )   SPSS commands
    .                 )   and
    .                 )   data
FINISH                )
$EOD
.COPY *.CDR=*.CDR(A)
.R SPSS
*LPT: CDR:
.IF (ERROR).CLOSE
$EOJ
```

1.8   BMDØ5R - POLYNOMIAL REGRESSION

BMDØ5R has been converted to run on the PDP-10 and is now available on the STA: directory.   The recommended deck setup is:

```
$SEQUENCE
$JOB
$DECK CDR.CDR

    .
    .   data
    .

$EOD
.SET CDR CDR
.RUN STA:BMDØ5R
<end of file>
```

2   R GRIPE MESSAGES

'GRIPE' messages are only collected daily.   If you have a problem that requires more immediate attention, it is suggested that you use 'PLEASE' - or ring the general service number extension 188 or 703188.

3   CHANGES TO THE LINE PRINTER SPOOLER

A new version of LPTSPL, version 5(240)-2 replaced 5(231)-2. It corrects a few errors, one of which caused the output forms limit to be exceeded if the last page had printing below the bottom of the form. The /PRINT:SUPPRESS switch is more useful now since tabs are not suppressed and overprinting does not occur. Log files are printed without file headers - part of a bid to save paper.

4   PAPER TAPE PUNCHING

Care should be taken if the TPUNCH command or other methods of punching paper tape are used.   While in discussing the /FILE:ASCII switch in the discussion of the command, it is stated that the default mode of the file is ASCII; attention is also drawn to the /TAPE:mode switch which is more relevant to punching of tape. The file will be punched in the mode of the file itself and not necessarily according to the nature of the file which can only be assumed.

In many cases, utility software will use binary mode to process files for reasons of efficiency.   Thus the files normally created by EDIT, TECO and PIP for example will be created in binary mode. If such a file is punched without /TAPE:ASCII, it will be punched in binary mode - not what the normal user expects!

Some files carry a large overhead in the form of trailing or multiple spaces which could be replaced by tab characters which may be removed by .COPYing with the T switch (removes trailing spaces) or the C switch (removes trailing spaces and replaces multiple spaces with tabs).

These trailing spaces would not normally be printed since either in Editor or with the TYPE command, they are suppressed.   However they may add significantly to the size of the file which is to be punched out; in one example recently, the punched file was reduced from 66 metres to 28 by the C switch.   The cost would have been reduced from $13.13 to $5.61.

5   NEW VERSIONS OF KJOB AND LOGOUT

New versions of KJOB and LOGOUT have been installed in the system. The minor changes introduced should not affect users in normal circumstances.

6   ERSATZ DEVICES

Newsletter N-171 which announced the release of the 5S07 monitor listed a large number of ersatz devices but did not give much indication as to their functions or usage.

It has become the practice to designate certain disk directories as having global interest and to give such directories a mnemonic name.   This name is restricted to 3 characters, a fourth character being reserved to indicate the directory on a specified disk device of the public disk system.

These symbolic or ersatz devices are specially recognized by the monitor and some system cusps and given many of the attributes of disk-like devices. Thus the ersatz device may be OPENed and a file LOOKUP done, though naturally it is not possible to append a ppn to the file descriptor.

In summary, certain special directories are given three character mnemonic names. A fourth character may be appended to indicate the structure within the public disk system. Thus -

NEW: means   DSK:[1,5]   and

NEWA: means   DSKA:[1,5]   and so on.

Note: For a limited period the U.Q. version of the 5S07 monitor will, when a fourth character is given, make certain assumptions only if the original ersatz device was not found. Thus PLOT: should mean DSKT:[5,106]. If PLOT: does not exist then for a limited period the U.Q. monitor will try for PLO: which means DSK:[5,106]. This is a feature to aid conversion from the different way in which these ersatz devices were handled in the 5S06B monitor.

The following is a list of ersatz devices of significance to users and their intended function as implemented in the U.Q. version of the 5S07 monitor:

Name	ppn	Function
OLD	1,3	OLD version of system software
STD	1,4	STandard system Directory
NEW	1,5	NEW or experimental software library
SYS	1,3 1,4 or 1,5	The SYStem library may be any of 3 directories depending on the user's search list
HLP	2,5	HeLP directory
BAS	5,1	BASic library
COB	5,2	COBol library
MAC	5,7	MACro library
DOC	5,14	DOCumentation library
MAT	5,101	MAThs and MATrix library
LAN	5,102	LANguage library (various computer language compilers etc)
GAM	5,103	GAMes library
SIM	5,104	SIMulation library

Name	ppn	Function
STA	5,105	STAtistics library
PLO	5,106	PLOtting library
TUT	5,110	TUTor and teaching library
OPR	5,112	OPerations Research library
UTI	5,113	UTIlity programs library
ALL	your ppn	your ppn on all mounted structures, regardless of your present search list
LIB	library ppn	the library ppn as specified by your search list

Please note that SYS, ALL and LIB differ from the other ersatz devices as indicated in the comments. Other ersatz devices exist but are primarily for internal functions and it is possible that additional ones may be added in the future.

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