Appendix A
DataView Commands

A

ACCESS bank   open databank for read

ADD expr,expr,...   add terms to a regression

ADD CONSTANT   include constant term (after SUPPRESS)

AUTODOC   used to move series documentation with data

AUTODIS   automatic frequency distribution, with options LINE, EVEN, or STEP

AUTOFREQ   automatic frequency conversion, with options AVG, SUM, FIRST, MID, LAST, MAX, or MIN

AUTOSAVE REG   used to save regression commands

B

BANKS   list currently open databanks

C

CHANGE ADJUSTMENTS dates   change solution file adjustment values

CHANGE ASSUMPTIONS dates   change exogenous variables values

CLEAR MEMFILE   clear memory file

CLEAR NOTATIONS   remove fullscreen plot notations/labels

C Continued

CLEAR PLOT   remove plot title, units, scales and footnotes

CLOSE ALL   close all databanks

CLOSE bankname   close given databank

CLS   clear screen - macro command

COMPILE   compile model, with options FIXORD and
                              LSE= in parentheses

COMPARE SOLUTION TO
                      compare current solution to memory file, Databank,
                          or other solution file variables

COMPUTE MEAN,VAR,SDEV
                      compute mean, variance or standard deviation for series

COMPUTE CORRELATION   compute correlation matrix

COMPUTE COVARIANCE   compute covariance matrix

COPY ADD/MULT TO   copy additive/multiplicative adjustments to data bank
                          or memory file

COPY SER=aa-zz FROM bank TO MEM   copy all series
COPY SER=aa-zz FROM MEM TO bank   in the given
COPY SER=aa-zz FROM bank TO bank   alphabetic range

COPY SOLUTION TO   copy solution to Memory File, Databank or
                          other solution file

CREATE bankname   create new databank

D

DATES   report current date limits

DEFINE MODEL modelname
                      create a new model under the given name

DEFINE TABLE   build table (HELP TABLE for details)

DEFINE SERIES:series   put new variable in databank index

DELETE seriesname   delete series with given name. Usually Memory File;
                          Databank if UPDATE option in force

D Continued

DETACH   detach model and/or solution file

DO   execute held command

DOCUMENT series

                add to or change documentation of existing series

DOS   invoke DOS as a subtask

DOS command-string   execute a DOS command

DOSLIST items   defines DOS commands as MODLER commands

DPLOT items AS filename send plot to graphicsfile

DROP k1 k2 ...   drop regression terms by number

E

ECHO   echo commands, with options ON or OFF

EDIT modelname   edit model having given model name

END   end session

ENDOGENIZE list   re-endogenize model variables listed

EXCERPT   copy regression results to command processor

EXCERPT TO MACRO:macroname

                copy regression results to macro file

EXOGENIZE list   exogenize model variables listed

EXPORT SERIES   export data series in a binary file

EXTEND ADJUSTMENTS   extend adjustments through given dates

F

F(used in regression commands, such as:

  expr=F(expr,expr,.)   OLS regression (HELP REGRESSION for details)

  expr=F(expr,expr,...;AUTO)

                regression with autoregressive corrections
                    (HELP AUTOREGRESSIVE for details)

F Continued

expr=F(expr,expr,...;PRN)   regression with hard-copy output

FETCH series   fetch series into memory file

FIND string   list series with given string in name or description

FOOTNOTE   footnote for tables/plots (stacks up to 6)

FORECAST dates   make forecast for given forecast dates

FORCE dates   force option for solutions (HELP FORCE for details)

FORCFILE forcfilename specify forcfile

FREQUENCY   report current frequency

FULLSCREEN   enable or disable fullscreen graphics feature;
                          options ON or OFF

G

GET series   copy observations to solution file

GFIND keyword   select group based on keyword attribute

GO   execute recalled command after editing; alternatively
                          also usually re-executes last command given.

H

HAXIS series   series for horizontal axis (scatter/trace plots)

HAXIS TIME   reset plots against time

HAXIS TIME,yypp,yypp... plot against time with verticals at given dates

HINDEX   hardcopy INDEX

HOLD   hold last command for future execution (see DO)

HPLOT   execute Hewlett-Packard plot

HPRINT   hard copy print

H Continued

HPSPECS string   initialisation for HP plots

HREG   sends regression display to printer

HSPRINT   send solution file observations to printer

HTAB SERIES   hard copy column table

HSCALE const-const   scale limits for horiz axis (scatter/trace plots)

HSCALE DATES=yypp-yypp   dates window for time-series plots

HSCALE LOG   select log scale for horizontal axis

HSCALE OFF or LINEAR   select linear scale

HUNITS text   text for horizontal axis in plots

I

IFERR   macro command, used for error testing

IMPORT   execute a data import program

INCLUDE   include graph or constant in regression; options GRAPH
                            or CONSTANT

INDEX   list memory-file series

INDEX (aa-zz)   list memory-file series in alphabetic range

INDEX bank   list series in bank

INDEX bank(aa-zz)   list bank series in alphabetic range

INDEX bank(aa-zz,STD) list bank series with documentation

INIT MEMFILE   explicit initialisation of memory file

INSTRUMENTS list   specify instrument for Two Stage Least Squares

J

JUMP   macro command

L

LABEL row,col "text"   put text on plot, starting at given   row,column

LASTREG   re-run last regression

LASTPLOT   re-run last plot

LAXIS BLANK   blanks left plot axis values

LEGENDS BLANK   blanks plot legend(s)

LEGENDS OFF or ON   turns off/on plot legends display

LIST option   list available files, including as options BANKS,
                  MACROS, MODELS, MEMORYFILES,
                  SOLUTIONS, etc.

LOADMF fname   load data from saved memory file

LOG databankname   display series data details and date of last update

LOG bank(aa-zz)   display details of series data availability and
                   date of last update.

LPRINT table name AS printfile   Create Lotus 1-2-3 Printfile

M

MAKE SOLVFILE dates   create solution file for given dates interval

MANUAL   display reference manual on screen

MODEL   identify currently used model

N

NUMCHAR   designate character as numeric

O

OPEN   open databank for access

OVERLAY k pgmname   run side-by-side program in k K RAM space

P

PAUSE   pause command - for macros

PLOT series,ser...   plot up to 4 series

PLOT expr,expr...   plot up to 4 expressions

PLOT ..,const,const   plot with extra horizontal axes

PLOT SOLUTION   plot solution variables

PLOT SOLUTION DIFFERENCES
                plot solution differences

PLOT SOLUTION PERCENT DIFFERENCES
                plot solution percent differences

PLOT SOLUTION COMPARISON
                plot solution comparisons

PLOTTITLE title   title for plots

POP   data entry macro command

PPLOT items AS orientation   send plot to printer, orientation = P or L

PRINT expression   display result on screen

PRINT GRAPH   predicted and residual values from last regression

PRINT series   display series on screen

PRINT SOLUTION   print onscreen table of solution values

PRINT SOLUTION DIFFERENCES
                print solution differences

PRINT SOLUTION PERCENT DIFFERENCES
                print solution percent differences

PRINT SOLUTION COMPARISON TABLE
                print solution comparison table

PRINT TABLE tab   print pre-defined table

PRINT VARCOV   print variance-covariance regression parameter matrix

PROJECT series*k FROM date AS series   extrapolate a series

P Continued

PROJECT EQ name FROM yyyypp-yyyypp AS seriesname
                        extrapolate an equation

PUTEQ   autocode regression equation into model

Q

QUIT   Quit command; used in various contexts to stop processing
                        without saving results

R

RAMDRIVE letter   specify the drive for ramdrive

RAXIS BLANK   blanks right plot axis values

READ ADJUSTMENTS dates
                        specify for variables in solution file adjustment values

READ ASSUMPTIONS dates
                        specify assumed values of variables in solution file

RECALL   recall last command for editing

RECALL HOLD   recall held command for editing

RESTORE series(k)   restores deleted series number k

RESTRICTIONS:R=...;C=...   specify linear restrictions

RSCALE   scale limits for rh axis of SPLIT plot

RSCALE:LSCALE*k   make right axis scale values a k multiple of left scale value,
                        where k is a real   number

RUN macro   execute macro file

S

SAVE PREDICTED AS series
                              save regression results in memory file

SAVE RESIDUALS AS series
                              save regression results in memory file

SAVEMF fname   save memory file on disk

SAVEPLT fname   save plot specifications in a macro file

SAVEREG   copies regression command to macro

SCALE const-const   scale limits for vert axis of plots

SCALE LOG   log scale for vertical axes

SCALE OFF or LINEAR   linear scale for vertical axes

SEAS(series)   seasonal adjustment

series=expression   store result in memory file or databank

series,yypp: value value value ...
                              enter observations in memory file or databank

series=F(series,series,...)
                              OLS regression with series

SET ALLOWNA=   permits NA observations to be used

SET COLOR=   sets foreground/background character-screen colors

SET DATES=yypp-yypp   set date limits

SET DEC=k   fix decimal places for tables (k=5 to unset)

SET FREQ=freq   set data frequency

SET HPLOT=HP1 or HP2   defines the plotter port for HPLOT

SET LINES=k   defines the screen lines/page, incl plots

SET NATEXT string   defines replacement text for NA

SET PAGENO=k   initializes hard copy page numbering

SET PEN=pppppp   select HP pens for axes, text and series

S Continued

SET PLOT=style

POINTS	point plot or scatter diagram
LINES	line plot or two-dimensional trace
BARS	bar chart
SBARS	stacked bar chart
LBAR	line plot superimposed on bar chart
BOX	box in plot, using axes
HALF	place plot in left half of screen
FULL	place plot in middle of screen

SET PLOT = output device

CHAR	text screen
HR or BW	high-resolution (black-and-white) graphics screen
LR or COLOR	low-resolution (color) graphics screen
HP1 or HP2	pen plotter (HP 7470A or 7475A)
NULL	suppress plot display

SET PLOT=screen hardware

MONO	IBM mono
GRAPHICS	IBM color/graphics
ENHANCED	IBM enhanced graphics
ENHANCED MONO	enhanced monochrome graphics
HERCULES	Hercules mono

SET PRINT=k   controls print width of displays (k=80,132,240,etc)

SET PRNTR=Ck or Nk   set printer to condensed or normal type
                     (k=80,132,240)

SET REGSPECS=k   used to choose regression display

SET SOLPARMS: used to define model solution options

SFETCH   retrieve solution file observations

SIMSET   invokes solution file editor SIMSET

SINGLE EQUATION name   create single equation model and name it

SOLVE dates   solve model for specified dates interval

SOLVFILE filename   attach solvfile with name filename

SOLVFILE filename1 FROM filename2   create solvfile filename1 using filename2

SPLITSCALE ON   plot multiple expressions with two vert scales

S Continued

SPLITSCALE OFF   plot with single vertical scale

SPOOLPRINT ON   route hard-copy output to a disk file

SPOOLPRINT OFF   close disk file and route hard-copy to printer

SPOOLREG   create disk copy of regression display

SPRINT   print solution file observations

STOP   end program from inside macro

STORAGE bank   open databank for write

STORE seriesname   store series in open storage bank

SUPPRESS constant   suppress constant term in regressions

SUPPRESS graph   suppress graph of predicted and actuals

T

TAB SERIES=aa-zz   print memory file series as column table

TAB SERIES=aa-zz FROM bank   print series from bank as column table

TERM   macro termination if error is made

U

UNITS text   text for vertical axis in plots

USE modelname   use model specified for forecast, etc.

UPDATE bank   open databank for updating (read/write)

V

VIEW expression   display series or expression

VLIST   solution variable list

MODLER Functions

Arithmetic Non-itertemporal functions (x may be a series or expression)

ELGT(x)	logistic curve
EXP(x)	exponential
LGT(x)	logit function
LN(x)	natural logarithm
LOG10(x)	logarithm to base 10
SIN or COS or TAN(x)	trigonometric functions
ABS(x)	absolute value
ROUND(x)	value rounded to nearest integer
TREND(x)	computes regression trend
TRUNC(x)	integer part of value
MOD(x1,x2)	remainder of x1 after dividing by x2
PDIFF(x1,x2)	absolute value of x1 minus x2
SIGN(x1,x2)	x1 with the sign of x2

Inter-temporal functions (x may be a series or expression)

APCT(x)	annualised percent change
%(x)	percent change
DIFF(n,x)	x(t) - x(t-n)
LAG(n,x)	x(t-n)
LEAD(n,x)	x(t+n)
LN(n,x)	logarithm of x(t-n)
MAVG(n,x)	sum(x(t),x(t-1)...x(t-n+1))/n

Functions defined over current date limits (x may be a series or expression)

MAX(x)   maximum value

MIN(x)   minimum value

MEAN(x)   mean value

SDEV(x)   standard deviation

VAR(x)   variance

Data-generating functions

TIME(value,date)   time trend increasing by 1 each period and equal
                                 to the given value at date

DUMMY(date=value)   value given at date, zero otherwise

DUMMY(Qk=value)   quarterly dummy taking given value in quarter k

DUMMY(S or M or Wk=value)
                                 semi-annual, monthly or weekly dummy variable

NAZERO   change zero observations to NA

ZERONA   change NA observations to zero

Frequency conversion functions (x must be a series)

DIS(LINE or EVEN or STEP or ALLOCATE,x[,y])   distribute function

FTRAN(AVG or SUM or FIRST or LAST,x)
                                 average/sum/first or last

SELECT(j/k,x)   jth observation out of each k

Appendix B

MODLER Errors and Warnings

The following describes the meaning of each of MODLER's error messages. The error messages are listed in alphabetical order by the first word of the error message following the word "ERROR" or "WARNING". As a group, the errors are listed first, followed by the warnings.   The distinction is that errors interrupt processing whereas the warnings are informational.

Error Messages

____ALREADY IN STORAGE BANK

A series of this name already exists in the Storage bank. Another cannot be defined, unless you first delete the existing series.

____ CANNOT BE DELETED

 This message indicates that an attempt has been made to delete a series, but that some error has been made, possibly including that the series to be deleted cannot be found. There should be a supplementary message indicating the nature of the problem.

____ CANNOT BE FOUND

 See "CANNOT FIND ____ " error message below

____ IS THE WRONG FREQUENCY

 Usually this message means that the series retrieved have a frequency that does not match the frequency last set using the SET FREQUENCY command. It can imply that the wrong data bank is accessed (or that no data bank is accessed).

____LACKS OBSERVATIONS

The series exists, but lacks any observations over the current SET DATES interval.   The series may lack observations altogether.

____ MISSING (SAMPLE PERIOD) OBSERVATIONS

This message will usually appear in response to a regression command if one or more of the series used in the regression contain missing observations. While MODLER automatically trucates series with not available endpoints, the user is responsible for insuring that the series are complete within the range of availability.

____ NOT AVAILABLE FOR THE DATES SPECIFIED

The message usually indicates that the series named exists in an open data bank, but that it is defined on a time interval that does not overlay the time interval last specified using the SET DATES command. Alternatively, if a transformation or other more complex mathematical operation is being performed, there may be a mismatch between the availability dates of the series being used, resulting in a truncated dates interval that does not overlap the availability dates interval for the series named. In any case, check the availability of the series being used: print them individually or use the STD index option.

____ NOT DEFINED IN BANK

AUTODOC OFF has been specified and the series you are trying to add to the bank cannot be added until you first define it using the DEFINE SERIES command; alternatively, set AUTODOC ON.

____ OBSERVATIONS OUTSIDE .... DATA LIMITS

The series being stored has observations that are outside the STORAGE Data Bank or Memoryfile date limits. This message may indicate that the series has too many observations or that you need to increase the observation size of the Data Bank or Memoryfile.

____ USABLE ONLY FOR ACCESS

The creator of the data bank has marked it "read only". Therefore, it cannot be opened either as a storage bank or for update.

() DO NOT MATCH

There is a mismatch between the number of open brackets "(" and the number of close brackets ")" in a regression command, transformation, or other mathematical expression or function.

A

Abort, Retry, Fail?

This messages indicates some hardware problem, such as leaving the diskette drive door open, but asking for a directory.   This is normally a recoverable error, with the choice of Abort implying that you wish to cancel the command, but continue with MODLER.   The choice of Fail implies that you wish to ignore the error, in the spirit of "Damn the torpedoes..."   Retry should be used after you have corrected the apparent problem.

ACCESS DATA BANK LIMIT REACHED

A maximum of 15 data banks can be accessed simultaneously. This message indicates that an attempt has been made to access 16 or more data banks.

ADJUSTMENT DATE LIMITS EXCEEDED

The constant and multiplicative adjustments in a solution file cannot be extended, except using the extend command. In this case, an attempt has been made to extend the limits illegally.

AN EXISTING SERIES (SERNO #___) CANNOT BE REPLACED WITH THIS COMMAND

This message indicates that an attempt has been made to define a series, but that there is already a series present in the location (or having the same name) as the series to be defined. Since defining a series first blanks the location, the orginal series would be distroyed. In order to redefine a series, you must first delete the old series. However, to simply change the documentation (or certain other characteristics of a series), you can use the DOCUMENT command instead of the DEFINE SERIES.

ATTEMPT MADE TO DIVIDE BY ZERO

During a transformation, or other mathematical operation sequence, an attempt was made to divide by a zero value. Such a value may exist as a series observation or it may be an intermediate result of a series of mathematical operations. The result will be set to NA for all affected observations.

B

BANK CREATION COMMAND MISSPECIFIED

Bank creation must be done carefully. See the description of bank creation in Chapter 5.

BANK OR FILE EMPTY
INDEX DOES NOT EXIST

This message can appear either when neither a Memory File nor banks are accessed or when there a no series in the relevant bank or Memory File. Use the BANKS command to verify which, if any banks, are accessed.

C

CANNOT FIND: _____

This message (or slight variants on it) is one of the most commonly encountered error messages. It indicates that the series (or other entity) sought cannot be found. The problem can occur, for example, if series names are misspelled, the wrong combination of upper and lower case letters are used, or the series does not exist in any of the open data banks or memory file. It can also indicate that no data banks are open. First use the BANKS command to determine which banks are open. If the correct banks seem to be open use the FIND command to search for the particular series.

CANNOT FIND FILE: _____

The file named cannot be found on the current (or specified) disk drive and directory. Use the CD command to determine the current drive and directory. The problem may be that you have changed from the original drive or directory.

CANNOT FIND .MOD FILE - CANNOT PRINT MODEL

To print all or part of the equations of a model, the .MOD file must be available on the appropriate drive and directory. MODLER cannot find this file and therefore cannot print the model's equations.

CANNOT FIND REGRESSION RESULTS

Once a regression has been run, MODLER attempts to retain as much information as possible about the results. However, this information is not kept perpetually, except by explicit request. The CANNOT FIND...RESULTS message means that information has been lost about the last regression performed and that any results displayed would not necessarily be correct. The solution is to re-execute the regression.

CANNOT INTERPRET COMMAND

This message indicates that the command is either incomplete (including misspelled command words) or unexpected in the context it was encountered. In many cases, the problem is likely to be obvious. However, if it is not, use the F10 function key or the HELP or EXPLAIN commands to obtain information about the syntax of the uninterpreted command.

COMMA OR < MISSING

This message indicates that a distributed lag specification ended with an unexpected character. Either a comma (indicating another term) or a <(indicating the end of a distributed lag specification) must appear before the end of the command processing.

COMMAND IGNORED

When an error is made during the processing or execution of a command, execution of the command will usually be stopped. The message COMMAND IGNORED simply confirms that the execution of the command was stopped and that MODLER has ignored that it was ever issued. In contrast, warnings usually result in the execution of the command, but restricted execution, as when the command is executed, but over a shortened date range.

D

DATA FREQUENCY MISSPECIFIED

The frequency must be given as Weekly, Monthly, Quarterly, etc. Not 52, 12, 4, etc.

DATES MISSING

Certain commands (PROJECT EQ, SOLVE. FORECAST, MAKE SOLVEFILE, etc.) required that a date interval be specified as an integral part of the command. This message indicates that those dates are missing—or that MODLER thinks they are missing for some reason.

DATES INCORRECTLY SPECIFIED

Generally, MODLER permits some latitude in specifying dates (196001, 6001, and 60 all refer to either the year 1960—if annual data—or the first period of 1960). However, generally two dates marking a date interval should be separated by a dash and dates should not be given with any characters within the dates (such as 1960:1). This message indicates an illegal dates format.

DATES OR FREQUENCY NOT YET SET

You are attempting to perform an operation that requires that both frequency and date range be specified in advance. In particular, tables cannot be printed until the dates and frequency are correctly set.

(DISK) DATABANK OR FILE CORRUPTED. RECREATE

As in the case of the message "END OF FILE OR DEFECTIVE RECORD ENCOUN-TERED" this message can indicate either that the wrong file has been accessed or that the

file is corrupted.   The word DISK may appear to confirm that the problem is with a disk file.   If it seems that the file has been corrupted, Save it and contact Alphametrics; it may be possible to re-structure the file, saving all or part of its contents.

DROP COMMAND MISSPECIFIED

  The rules for the regression Drop-Add command are set out in the online help facility. However, briefly, when used as a command DROP must be followed by one or more numbers (separated by spaces) that specify the sequence number of the regressor terms to be dropped. ADD must be followed by a complete specification of the terms to be added, separated either by commas or blanks.

E

END OF FILE OR DEFECTIVE RECORD ENCOUNTERED

  This message can occur under either of two circumstances. The first is when the length of the file is shorter than MODLER expected. The second is when one of the records has been damaged. In either case, what may have happened is that the file accessed is the wrong file—for example, a solution file rather than a data bank; this can occur if the standard extent defaults are not used. Alternatively, the file may be the correct one, but may have been damaged. Use the DIR command to check to see if the length of the file is suspiciously short. A file can be damaged during the process of copying it from one part of a disk to another or from one drive to another.

EQUATION # ___ NOT NORMALIZED

  At the time a model is compiled, all model equations must be normalized (that is, the variables they explain or solve for must have been specified for each equation). This message indicates that the equation number given has not yet been normalized. Type PRINT MODEL #k (where k is the number appearing in the error message) in order to determine which equation it is; provided that the model .MOD file is attached (required for compilation), MODLER will then print the equation on the screen.

EQUATION REQUESTED NOT SAVED
CANNOT BE INCLUDED IN MODEL

  The equation contains serious errors and cannot be saved; as a result it cannot be included in a model.

EXPRESSION CONTAINS   >50 RHS ELEMENTS

  This message usually appears when equations created outside the MODLER environment are being added to models. Expressions must not contain more than 50 right-hand-side elements, once they have been normalized. The solution is to split the expression into two or more parts and resubmit.

EXPRESSION CONTAINS >36 COEFFICIENTS

Coefficients consist of equation parameters that have been estimated using the MODLER (or MODLER BLUE) regression facilities and, under some conditions, parameter-like constants that appear in equations. This message is most likely to appear after an equation has been edited.

EXPRESSION CONTAINS >45 CONSTANTS

This message usually appears when equations created outside the MODLER environment are being added to models. Constants in this context include the parameters of equations estimated outside the MODLER environment as well as and other numeric constants that appear in the expression.

F

FILE NOT CONFIGURED AS A MEMORY FILE

This message indicates either that an attempt has been made to load the wrong file as a Memory File or else the file has been damaged in some way.

FIRST SERIES NUMBER MISSPECIFIED

This message occurs when MODLER cannot find the first series number and is attempting to TABulate SERIES or COPY SERIES using series numbers (relative series location numbers).

FOR 20 VALUES OF RHO REGRESSOR VARIABLES MATRIX SINGULAR

This usually indicates that the regression command is misspecified and that a Hildreth-Lu autoregression search is being performed. MODLER allows for some values of rho to result in singular matrices, but if 20 or more singular matrices are generated, this is taken to indicate a fundamental problem.

FORCFILE MISSING

This command will appear if the FORCE command is used without having previously executed a valid FORCFILE command. The condition can be corrected simply by executing the FORCFILE command first.

FORCFILE MUST BE A SOLUTION FILE

A FORCFILE is a special solution file, one being used to hold reference values for a forced solution. This message indicates that the file specified as a FORCFILE does not have the configuration of a solution file: it may be another type of file, wrongly labeled or attached, or it may have been damaged since it was created.

FREQUENCY MUST BE SET

The operation referred to by the last command (such as creating a data bank, retrieving data series in some instances, or using constants in expressions) requires the frequency to be set in advance. Use the SET FREQUENCY command.

H

Hardware Problem. May be diskette or printer. Cancel last command or Retry iut? (C/R)

DOS indicates that there is some sort of hardware problem that prevents the execution of the last command.   Press C to cancel that command, or R to retry it.   If you cancel the command, you normally will be returned gracefully to MODLER. However, in some cases., the problem may be sufficiently severe that your machine will lock up.

I

INADMISSIBLE FILE NAME: _____

Inadmissible file names include those that contain too many letters, begin with a non-alphabetic character, or contain illegal characters.

INADMISSIBLE SERIES NUMBER: _____

Generally indicates that the series number given is either a non-positive number or exceeds the number of possible series in the Data Bank or Memoryfile being used.

INAPPROPRIATE DATA BANK / FILE

Check the rules of the command you are attempting to use, to see what they specifiy about any data banks or files that are referenced.   You cannot for example, write to a data bank that is only opened for access, not storage or updating.

INCOMPLETE OR MISSPECIFIED COMMAND

Usually means that a delimiting space has been omitted, or that a command word has been misspelled.   It can mean that a keyword or other command element is missing

INCORRECT DATES. BEGINNING=kkkk   ENDING=kkkk

The dates just given are illegitimate. Check to see if there are any obvious input errors.

INCORRECT SERIES FREQUENCY

The current frequency conflicts with the frequency of a Data Bank or Memoryfile series. If the series is in an ACCESS bank, it may be possible to set AUTOFREQ or AUTODIS to permit automatic frequency conversion.

INCORRECT SERIES NAME

The name of the series in the storage (or update) data bank does not agree with the name of the series to be stored. This error message may indicate that the data bank has been damaged in some way.

INDEX/LOG COMMAND MISSPECIFIED

The INDEX or LOG command has been incorrectly given. The problem is likely to be an error in the use of parentheses to bracket a series name range or specify the type of index to be produced.

INDEX INTERVAL EMPTY

For the given index interval, series cannot be found. The message may indicate that the wrong bank has been specified or the wrong interval.

INITIAL DATE TOO EARLY FOR DATA BANK

When it is created, you must specify the first date of any series to be put into the bank. This error message appears subsequently if you attempt work with data having an earlier initial date than the first date of the bank.

INDIGESTIBLE EXPRESSION

The expression is too complex for MODLER to interpret. Solution is to simplify the expression by splitting it into two or more expressions.

INSUFFICIENT _____ TO RUN PROGRAM

The blank will be filled with either **DISK SPACE** or **CONVENTIONAL MEMORY**. This message means what it says: exit MODLER and clear some space on your disk or free somc conventional memory. Usually, MODLER requires 100-200K or more of hard disk space and at least 530,000 bytes of conventional memory.   Its even better to have 500K or more of disk space, if you are creating or expanding data banks, models, or other files that may become large.

INSUFFICIENT SPACE FOR PDL VARIABLES

There are too may distributed lags for the available program storage space. This problem is likely to occur only rarely, when three or more high-order distributed lags are included in a given regression equation.

L

LAG LENGTH MUST BE GIVEN BEFORE RESTRICTIONS

The length of the distributed lag must be given before any of the restrictions (NEAR, FAR, BOTH, R=) are introduced.

LAST SERIES NUMBER MISSPECIFIED

This message occurs when MODLER cannot find the last series number and is attempting to TABulate SERIES or COPY SERIES using series numbers (relative series location numbers).

M

MAXIMUM LAG=25

This message indicates that an attempt has been made to specify a distributed lag with more than 25 lag terms.

MEMORY FILE EMPTY

You probably asked for a Memory File index and there is currently no memory file accessed.

MEMORY FILE FULL. CANNOT ADD SERIES

A Memory File can contain a maximum of 500 series.

MEMORY FILE NOT INITIALIZED

MODLER is being asked to perform some operation that requires the use of a Memory File, but no memory file is currently open. The solution is to open a Memory File, either using the LOADMF command or by creating one—by attempting to store a data series (implicit Memory File creation) or by executing the INITIALIZE MEMORYFILE command.

MEMORY FILE SERIES TO BE LOADED HAS THE WRONG FREQUENCY

The frequency of the memory file series conflicts with that of the observations to be added. Check the frequency using the INDEX (STD) option.

MISSING TEMPLATE NAME

The MAKE TEMPLATE command must include the name of the template.

MODEL EMPTY. CANNOT REPLACE EQUATION

The REPLACE EQ# option has been invoked as a PUTEQ subcommand, but the model does not contain any equations.

MODEL FREQUENCY UNDEFINED

A model must have a declared frequency, declared using the DEFINE MODEL (or EDIT) FREQUENCY= subcommand.

MODEL HAS ONLY ___ EQUATIONS

This message usually occurs when MODLER is asked to print or copy equations the equation numbers for which are greater than the number of equations in the model.

MODEL INVALID. CANNOT BE ACCEPTED

There is something seriously wrong with the model to be saved, so much so that it cannot be saved.

MODEL LACKS EXOGENOUS VARIABLES

This message indicates that, in compiling the model—or subsequently in using it—MODLER was unable to find any exogenous variables. At present the absence of exogenous variables is taken to be an error; however, purely autoregressive models may be compiled and solved, by the simple expedient of adding a single exogenous variable to the model (for example, always taking the value zero).

MODEL FILE MUST BE SPECIFIED

A command syntax error has been made. The name of the model involved must be specified as an integral part of the command.

MODEL UNSPECIFIED OR NOT COMPILED

This message indicates that an operation requires the use of a model, but none is attached—or if attached it is not yet compiled. The model currently attached can always be determined by issuing the MODEL command.

N

NECESSARY DATA MISSING AFTER _____

The dates set for printing a table follow the last period for which the table is defined.

NECESSARY DATA MISSING PRIOR TO _____

The dates set for printing a table preceed the first period for which the table is defined.

NON-ALPHABETIC INITIAL CHARACTER

All MODLER commands must begin with an alphabetic character. The only permissible exception to this rule is the use of the percent sign (%) as a dependent variable function name in a regression command.   Otherwise the first non-blank character in a command must be a letter. Occasionally, this message may appear as an indicator that there is too little RAM in which to run the program properly or if the RAM has been corrupted; in this case, it appears whatever is typed in.

NO _____ BANK OPEN

The context requires the use of a Data Bank, but there is no ACCESS or STORAGE or UPDATE bank open. The banks currently open can be verified using the BANKS status command.

NO CONVERGENCE IN ___ ITERATIONS. SOLUTION ABANDONED

The model cannot be solved, either because it requires a higher maximum limit of iterations, or because it simply cannot be solved, without modification, using the particular solution method chosen.

NO INSTRUMENTS YET SPECIFIED

An attempt has been made to perform a Two Stage Least Squares (or Two Stage Principal Components) regression without having first executed the INSTRUMENTS command. This message also appears if TSLS is not an option in that copy of the program.

NO ITEMS SPECIFIED

The ITEMS subcommand of the DEFINE TABLE command must include a list of the table items in the form of a list of series names, separated by blanks or commas.

NO OBSERVATIONS AVAILABLE FOR SET DATES

This message indicates an attempt to print a table in which at least one row contains NA observations. See the SET ALLOWNA command documentation for further information.

NO REGRESSOR TERM NUMBER ____

Regressor term numbers must fall in the range from 1 to k, where k is the number of right-hand-side terms in the regression including the constant term (if any).

NO SERIES FOR SERIES NUMBER(S) ____ (TO ____)

This message implies that series are not available (or have the wrong frequency) for the given range of series numbers or the given series number.

NO SERIES NAMES FOUND IN SEARCH INTERVAL

This message can appear when using the TAB SER (TABULATE SERIES) command with a single series, but it usually indicates that the search interval needs to be widened. However, note that it can also indicate that the appropriate data bank or memory file is not open for access.

NO STORAGE BANK OPEN

The context requires a storage Data Bank, but there is no storage bank open.

O

OUT-OF-DISKSPACE OR A FILE FORMAT PROBLEM

This error message generally indicates that a file cannot be created or enlarged, which normally means that there is insufficient space on the hard disk. However, in some cases, it will occur when there is a file formatting problem; for example, using the wrong type of file in a particular context.

P

POLYNOMIAL DEGREE TOO LARGE

Polynomial distributed lags may be based upon polynomials of up to and including a 5th degree polynomial.

POSSIBLE PROGRAM ERROR. PLEASE DOCUMENT AND REPORT

This message indicates that MODLER has encountered some type of error condition, but does not recognize its particular nature. In some cases, the condition may be trivial; in other cases, it may be serious. This message often indicates that there is too little room on the hard disk to run the program; first check the remaining space on your hard disk, then contact your Alphametrics representative (http://www.modler.com)..

PRINTER NOT READY

This message appears under various circumstances, but it always means that the program could not write to the printer.   The reason may be that the printer has not been turned on, the cable is bad (or disconnected), the printer is out of paper, the printer is disabled, or some other such condition.

S

seriesname - WRONG FREQUENCY

This message occurs when attempting to store observations in a data bank and the frequency of the bank series is found to conflict with the frequency of the observations to be stored. Also occurs in other, similar contexts.

SERIES CANNOT BE CUMULATED TO A HIGHER FREQUENCY

This message usually appears because the series being retrieved is a lower frequency than the currently set frequency and the operation performed is not a distribution operation (using the DIS function).   Implicitly, MODLER is being asked to interpolate without sufficient information being provided to perform that interpolation correctly.

SERIES DATES MUST MATCH.

Operations such as computing the correlation or covariance between series require series with the same data availability. In order to perform the operation, the dates interval must be truncated.

SERIES # GIVEN INADMISSIBLE

Series can be addressed by relative location, as well as name, and the relative series number that has been specified is either negative or greater than the total number of series the bank (or memory file) can contain. If series numbers were not being used to refer to series, this message will normally indicate some time of command specification (or syntax) error.

SERIES NUMBER TOO LARGE

The series number given is either greater than the number of series in the relevant file or greater than the number of possible series (10,000).

SINGULAR MATRIX

The matrix of sums-of-squares and cross-products is singular. This may imply either multicollinearity (if the regressors are correctly chosen) or an error in specifying the regressors to use.

SOURCE EQUATION #___ NOT INCLUDED IN MODEL

This message indicates that the equation numbered as given has not been included in the model. This message is most likely to occur when copying from another model or macro file and the equation being copied contains syntax or other series errors.

SYNTAX ERROR

The command to be executed contains one or more unrecognized command words, or takes a form that breaks one or more MODLER command syntax rules.

T

TABLE PARAMETERS NOT DEFINED

In general, this message is most likely to occur if a number of commands have been issued since the last DEFINE TABLE command. MODLER attempts to keep table definition as long as possible, but at some point the space may need to be used. This message is particularly likely to occur if DOS operations are performed, other programs are executed, or the OVERLAY command is executed.

TIME VARIABLE DATES INADMISSIBLE

Check the currently set dates and frequency using the DATES and FREQUENCY command. The dates specified for the TIME trend variable conflict with the current setting of dates or frequency.

TO RESTORE SERIES, SERIES NUMBER (IN BRACKETS) MUST FOLLOW NAME

Once a series has been deleted, the corresponding entry in the data bank or memory file index is wiped out. Therefore, MODLER has no record of the location of the series. In order to restore the series, MODLER must be told precisely where the series is, using its relative location number (SERIES NUMBER).

TOO MANY LINEAR RESTRICTIONS

Only 15 (independent) linear restrictions are allowed.

TOO MANY PDLS

A regression equation may contain a maximum of 6 distributed lags. In practice, even 6 may result in too many regressor terms, particularly if other variables or expressions are also included; MODLER permits a maximum of 20 right-hand-side regressor terms.

TOO MANY SERIES. MAX=____

The series limit for the particular operation has been exceeded.

TSLS - EXOGENOUS VARIABLE MATRIX SINGULAR

The first stage matrix of sums-of-squares and cross-products of the instruments (system exogenous) variables is singular. In general, when a model is identified, this occurence implies that the same variable has been cited twice as an instruments. Check the INSTRU-MENTS command.

TWO OR MORE SERIES NEEDED

Operations such as computing a correlation or covariance matrix require two or more series.

U

UNACCEPTABLE SAMPLE PERIOD

Usually, this message indicates that the number of regressor variables exceeds the number of observations in the sample period.

UNDEFINED SERIES CANNOT BE ADDED TO DATA BANK

In general, series must be defined before they can be added to a data bank. However, this requirement can be over-ridden using the AUTODOC ON command (normally the default); in this case, the series is defined automatically when data is first entered (provided the series is not already defined). Whatever information is available is included.   Subsequently, even if AUTODOC ON has been specified, no documentation information will be changed except if the DOCUMENT command is used series by series.

UNKNOWN ARGUMENT OR KEYWORD

Commmands like PRINT SOLUTION ADJUSTMENTS consist of command words (PRINT SOLUTION) and keywords (ADJUSTMENTS); others like INDEX (A-ZZZ,STD) consist of command words (INDEX) and arguments (A-ZZZ,STD). This error message indicates that the keyword or argument used is incorrect.

UNRECOGNIZABLE DATA BANK / FILE

The bank or file name given does not match the data bank(s) or files currently open. This message appears in the case of commands that require a choice to be made from amoung accessed data banks or files.   Such commands include COPY, PRINT SERIES, and TABulated SERies.

V

VARIABLES UNDEFINED

During the process of compiling a model, creating a solution file (with the MAKE SOLVFILE command) or using a solution file, variables may be encountered that do not seem to fit. For example, a variable name misspecified in one equation of a model results in the finding of an exogenous variable that probably will not have a counterpart in any of the open data banks and probably will not be given values during a READ ASSUMPTIONS command sequence. Use the ENDOGENOUS and EXOGENOUS commands to review the variables MODLER thinks are in a model. Otherwise, use the BANKS command to verify which data banks are open (during a MAKE SOLVFILE operation).

Warnings

BANK SIZE LIMIT REACHED

The bank now contains its maximum number of series.   No more series can be added without first deleting other series.

DATA BANK EMPTY; CANNOT BE USED FOR ACCESS

This warning simply indicates that the bank does not contain any accessible series or observations.

EXPONENT TOO LARGE

This message indicates that if the exponent were taken the resulting number would be huge, far too large to be an appropriate value in the context. Usually, the message indicates an error in specifying an equation or transformation or, in the context of a simultaneous equation model, that something is wrong with the model.

FILE _____ ALREADY EXISTS. OVERWRITE (Y/n)?

This file, with a given name, already appears on the hard disk. This warning asks whether you wish to substitute one file for another.

INPUT DATA AVAILABILITY PERIOD TRUNCATED

The data available when series are reviewed are available only for a shorter period than the dates set. This message is particularly likely to occur when using two or more series with different dates of availability.

ZERO OR NEGATIVE INPUT OBSERVATIONS

Certain mathematical operations, such as taking the log of a series, require positive observations. This message indicates that the input series used for the operation contains zero or negative values; the output or result series will be given the value NA (or sometimes zero) for these observations.

INPUT DATA CONTAINS MISSING OBSERVATIONS

This message indicates that the series in question contains, within the ostensible period of availability, observations that are marked as not available (NA). To verify, set the date limits very wide (e.g. 1900 to 2000) and print the series using the PRINT command.

FREQUENCY TRANSFORMATION REQUIRED ADDITIONAL OBSERVATIONS

An attempt was made to perform a frequency transformation over a particular date interval and the input observations were not available for the required period of time. A subsidiary message will be printed stating whether the affected input values have been given the value NA or zero—thus determining whether the resulting values have been set to NA or not.

MODEL NAMED _____ ALREADY EXISTS. OVERWRITE (Y/N?):

Since a model of the same name already exists on the disk, MODLER is asking whether you wish to distroy it by overwriting the old model file with a new one.

NON-POSITIVE INPUT OBSERVATIONS

Logarithms and certain other functions require a positive argument value and do not operate otherwise. However, particularly in the case of a simultaneous equation model, this message may indicate a general problem with the model or transformation, not necessarily just a local problem.

NOTE: SOLUTION FILE HISTORICAL DATA BEGINS _____

This message indicates the first date for which a solution file is defined.   In addition, if there are lags in the model, the maximum lag must be added to determine the first date for which a forecast or simulation is possible; in any case, the first period of the solution file is reserved as a "SEED" vector to provide initial values for the solution. Generally speaking the message appears whenever an attempt has been made to add or use data for the period prior to the first usable solution file date.

SERIES DEFINED.
FREQUENCY SET BY DEFAULT

In defining a series, the FREQUENCY subcommand has been omitted. By default, MODLER will assign the currently set frequency to the series—including 0, if the global frequency is undefined. The DOCUMENT command may be used to reset a series' frequency, once it has been created.

SERIES DEFINED.
BUT NOT FULLY DOCUMENTED

In defining a series, one or more of the series documentation items has been omitted. By default, MODLER will assign the currently set frequency to the series frequency and will blank the description, source, and units. The Frequency Transformation Criterion will be set to "AVG" and DIS will be set to "LINE".   Each of these may be changed subsequently using the DOCUMENT command.

STORED SERIES LACKS OBSERVATIONS

This message indicates that NAs have been inserted into a data bank series and that there are otherwise no available observations. This may be done purposely, to blank out series observations, or it may occur accidentally.