

## Chapter 116

# Exporting Data

## Introduction

**NCSS** can export both text and numeric data to a wide variety of spreadsheets, databases, and statistical systems. You can either export the entire dataset or export a subset of the data by entering a list of rows and/or columns to export.

The table below presents a list of the types of files that can be exported by **NCSS**.

### List of Exported Files

<b>File Name</b>	<b>File Type</b>	<b>File Extension</b>
Access	Database	ACCDB, MDB
dBase	Database	DBF
Epi Info	Database	REC
Excel	Spreadsheet	XLS, XLSX
Gauss	Stat System	DAT
HTML	Text File	HTML, HTM
JMP	Stat System	JMP
LimDep	Stat System	CPJ
Lotus 123	Spreadsheet	WK3
Matlab	Stat System	MAT
Minitab	Stat System	MTW
NCSS 97-2007 Spreadsheet	Stat System	S0
NCSS 97-2007 Database	Stat System	S0Z
Paradox	Database	DB
Quattro Pro	Spreadsheet	WKQ
SAS	Stat System	SD2, SAS7BDAT, XPT
SPLUS	Stat System	DAT
SPSS	Stat System	SAV, POR
Stata	Stat System	DTA
Statistica	Stat System	STA
Symphony	Spreadsheet	WR1, WRK
Systat	Stat System	SYS
Text (Delimited)	Text File	TXT, CSV
Text (Fixed-Width)	Text File	TXT

### Export Limitations

The only limitation in exporting files is that some file types can only receive a limited number of rows and columns. You should check with the export file type before performing the export operation to make sure the data you are exporting is compatible with the resulting file type.

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## Text or Numeric Field Type

The database (and some spreadsheet) formats require that each field (column) has a designated type such as numeric or text. Since **NCSS** data can be text, numeric, or both, some assumptions have to be made during the export. **NCSS** checks the first row of data for each column that is exported. If the value in the first row is numeric, then the field is designated numeric. If the first value is text, the field is designated text. Once a field has been designated as numeric, any non-numeric values are changed to missing values during the export. Once a field has been designated as text, any numeric values are changed to text values.

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## How to Export Data to a File

For most export file types, the only step necessary to perform the export is to select the type and name of the file to export. For the rest, the Export Wizard guides you through the steps of exporting a file. Follow the on-screen instructions to complete the export. The file types that require additional information are NCSS 97-2007 Database files (\*.SOZ), Access files (\*.ACCDB or \*.MDB), and Text Files (\*.TXT or \*.CSV).

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## Selecting a File to Export

To perform an export, you must select the type of file to export. To do this, select *File > Export* (or *File > Export Subset*) from the Data Window menu and then select the type of file to export. The most-commonly exported files are displayed in the call-out menu. If the file type you want to export is not on this list, select *Other File Format*. Either way, this will bring up a dialog prompting you to name the file to which the data will be exported (If you are exporting a subset, you will first be presented with a dialog wherein you must select which rows and/or columns you want to export). You may provide a new name or select a file that already exists on your computer. If you select a file that already exists, it will be overwritten by the export procedure, so be careful. You can change the export file type by clicking on the dropdown box at the bottom of the dialog window near the *File Name* box. When you click the dropdown box, a complete list of exportable file types will be displayed. When you have named the export file, click *Save*. This will perform the export operation directly if no additional steps are necessary or start the Export Wizard if needed. You cannot change the export file after the wizard has started; to change the export file you must cancel the wizard and start again.

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## The Export Wizard

If you are exporting a file type that requires additional information beyond the file type and name, the Export Wizard will ask you to provide it before the export operation is performed. The file types that require additional information are NCSS 97-2007 Database files (\*.SOZ), Access files (\*.ACCDB or \*.MDB), and Text Files (\*.TXT or \*.CSV).

This section will describe the additional information that is required by these file types.

### Additional Options for Exporting NCSS 97-2007 Database Files (\*.SOZ)

The following additional options are required to export NCSS 97-2007 Database files with extension \*.SOZ. Usually you can leave all of these options at their default values.

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**Number of Empty “Add-On” Columns**

Since you cannot add columns to an NCSS 97-2007 database after it is created, this option allows you to specify how many columns to add to the end of the NCSS 97-2007 database beyond the number of columns in your dataset that have data and will be exported.

**Text Field Length**

This is the length of a data-cell's field. This must be at least ten. You can make this larger for longer text values. A text value requires four additional bytes of storage.

**Number of Extra Text Fields**

Additional space is added to the end of each record for this many extra-long (greater than six characters) text columns.

**Extra Text Field Length**

The length of the extra text fields that are stored at the end of each record.

**Additional Options for Exporting Access Files (\*.ACCDB or \*.MDB)**

The following additional options are required to export Access database files with extension *\*.ACCDB* or *\*.MDB*.

**Minimum Text Field Width**

This is the minimum width for a text field in the Access database. You should increase this number when exporting large text values.

**New Table Base Name**

This value is used to create the name of the new table in the Access database.

**Additional Options for Exporting Delimited Text Files (\*.TXT or \*.CSV)**

A fixed-width text file is one in which each value occurs at the same position on a row. The data may appear as a solid string of numbers. A format statement is needed to tell the program how to list the data on a row of the file. Besides the format statement, you must also designate what indicator should be used for missing values and what the total row length of the file should be.

**Delimiter**

You specify the character that is to be used to separate values in the file. If you choose “Other”, then you must specify a delimiter in the box provided.

**Export Column Names**

Check this option to store column names in the first row of the text file.

**Replace Missing Values With**

This box specifies the character(s) to be inserted for missing values.

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**Enclose Text Between**

Text may be enclosed between double or single quotation marks so that text variables with imbedded spaces, such as street addresses, can be processed correctly by other programs. This option specifies how text data should be treated.

**Number of Characters per Line**

This box specifies the number of characters per line. If "Automatic" is selected, each line will be long enough to hold its data, but no longer.

**Additional Options for Exporting Fixed-Width Text Files (\*.TXT)**

A fixed-width text file is one in which each value occurs at the same position on a row. The data may appear as a solid string of numbers. A format statement is needed to tell the program how to list the data on a row of the file. Besides the format statement, you must also designate what indicator should be used for missing values and what the total row length of the file should be.

**Format Statement**

This box contains the format statement that specifies how the data will be positioned in the output file.

The syntax is based on three single-letter commands and the slash character. These items are combined to form the format statement. These commands will be discussed next, followed by examples of format statements.

*L is for a Left-Justified Variable*

The character *L* is used to designate a left-justified column. The actual syntax is  $rLn.d$ , where  $r$  indicates the number of times the format segment is repeated,  $n$  represents the number of positions (characters) used, and  $d$  represents the number of decimal places. If  $r$  is omitted, it is assumed to be one. Note the  $n$  must include space for the decimal point (which is one character) and a minus sign (if necessary).

*R is for a Right-Justified Variable*

The character *R* is used to designate a right-justified variable. The actual syntax is  $rRn.d$ , where  $r$  indicates the number of times the format segment is repeated,  $n$  represents the number of positions (characters) used, and  $d$  represents the number of decimal places. If  $r$  is omitted, it is assumed to be one. Note the  $n$  must include space for the decimal point (which is one character) and a minus sign (if necessary).

*X is for Skip*

The character *X* is used to designate the skipping of certain character positions on the row. The actual syntax is  $Xn$ . The  $n$  represents the number of positions (characters) that are left blank.

*/ is for Next Row*

The character */* is used to transfer to the beginning of the next row.

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*Examples of Fixed Format Statements*

The format commands above, except for the slash, are combined using commas. The slash serves as its own separator and does not need to be combined with a comma. Note that the values are assigned to the dataset columns in sequence. Following are some examples of how these format commands can be placed together to form the format statement.

Column Values	Format Statement	Resulting Row
12, 45, 32	3L6.1	12.0 45.0 32.0
12, 45, 32	3L6.0	12 45 32
12.23, 45.56, 32.14	2R8.1,X10,R8.3	12.2 45.6 32.140

**Export Column Names**

Check this option to store column names in the first row of the text file.

**Replace Missing Values With**

This box specifies the character(s) to be inserted for missing values.

**Number of Characters per Line**

This box specifies the number of characters per line. If "Automatic" is selected, each line will be long enough to hold its data, but no longer.

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## How to Export a Subset of the Data to a File

The basic export operation exports all rows and columns. To export a data subset, you must select *File > Export Subset*. You can then choose which columns and rows to export. You can either enter a list or range of rows to export (e.g., "1-10, 15, 20-25" or "1-20") or, if you have an active filter, you can choose to export only those rows that pass the filter. You can also select a subset of columns to export using the column selection tool. All of the remaining steps will be the same as a normal export.