

The SAS system

In SAS the survey procedures are part of the main package (in the SAS STAT module) that would be used by anyone doing statistical analyses with this package.

Main package

SAS (<http://www.sas.com/>) is a package widely used in finance and in the pharmaceutical companies.

Availability

Expensive to commercial organisations. Cheaper via a CHEST for Higher Education organisations.

Reading in data from other systems

This is possible for most systems, and we have illustrated this for some exemplars. A rather confusing variety of tools are available that differ by the version of SAS being run.

What kind of package is it?

It is a heavyweight commercial package designed with the large commercial user in mind. It is good at manipulating large data files. But it also has a very wide range of high quality and up-to-date statistical software. It runs having procedures that operate on data sets. More than one data set can be open at the same time. It has sophisticated procedures or linking and merging data sets.

Any methods for complex surveys in the main package

Yes there are a series of SURVEY PROCEDURES that are part of SAS STAT (comes as part of the main package). These are the SURVEYSELECT, SURVEYMEANS, and SURVEYREG procedures.

General and Authorship

They have been written by SAS staff with academic advice and a paper describing their development is at (<http://support.sas.com/rnd/app/papers/survey.pdf>).

What do they do?

SURVEYSELECT is intended for those designing surveys. The other two procedures can be used to analyse survey data. They include the following features:

- Means (including subgroup means)
- Proportions
- Regression
- All variance estimation by Taylor linearisation
- Post-stratification cannot be handled.

Documentation for the main package

The version of the package used in the exemplars is Version 8.1. Documentation comes with the software, but can also be accessed online at (<http://v8doc.sas.com/sashtml/>).

Convenience (or not) and special features

SAS again has quite a steep learning curve. Once you can use SAS the survey procedures are easy to use and the output and error messages seem straightforward.

Using the SURVEY procedures with SAS analyst

This is a front end for SAS that is used in some work settings. THIS SESSION WILL BE COMPLETED NEXT WEEK

Special SAS macros

SAS allows users to write extensions for others that can make other methods available to users that are not in the main package. *Details of these will be added by users*