

VIEWS



News, Hints, Tips, and information for UK SAS Users

Issue 1 Winter 1998

Welcome to the first edition of views, a quarterly newsletter for UK SAS users. VIEWS is written for the benefit of busy programmers and analysts who need a fast-path to the information. For that reason it is deliberately short and easy to read.

Each issue will consist of at least four sections. **News** and **Diary** will keep you up-to-date with activities at SAS Institute and the remainder of the SAS world; **Did You Know...** will provide useful hints and tips; **The Consultant** will provide answers to your problems and queries. Occasional sections will include interviews with key Institute staff, and full-length feature articles on all aspects of the system.

VIEWS is an independent user group and relies upon the generosity of its sponsors and supporters for its events and activities. ASA recruitment and contract consultants are the sole official sponsors of this and future editions of VIEWS. ASA, who have a specialist division for SAS consultants, are keen supporters of the user group and we are very pleased that they should wish to demonstrate their support in this way.

For you to get the greatest benefit from VIEWS we need you to keep us informed of what you would like to see in it. Tell us about your SAS problems and queries; pass on your own hints and tips; let us know what you'd like to have included as feature articles. We hope that you find VIEWS educational, informative, and useful. If you *do* then let us know; if you *don't* then let us know! The VIEWS conferences continue to be popular and successful, we hope this newsletter will do so too.

Andrew Ratcliffe (Editor)

Did You Know...

If you have a useful hint or tip, send it to the Editor and share it with everybody.

BY Variables in Titles

You can insert labels and/or values of BY variables into titles. For example, suppose you have a data set sorted by the variable TRTSEQ, with label "Group" and formatted values "Placebo," "Wonder Drug," etc.

```
options nobyline;

proc print;
title "List for #byvar1 - #byvall1";
  by trtseq;
  var var1-var10;
run;
```

For each BY group, you'll get the titles:

```
List for Group - Placebo
List for Group - Wonder Drug
etc.
```

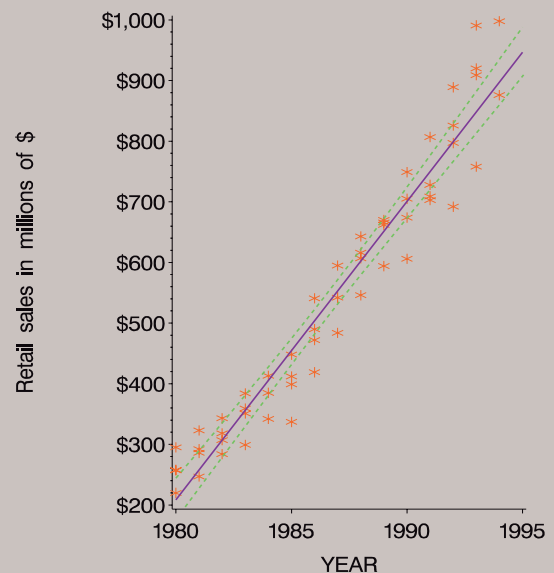
The NOBYLINE option suppresses the normal printing of the BY lines, so you don't see "Group=Placebo." You can turn it back on with OPTIONS BYLINE.

Andrew Ratcliffe

Printing Regression Equations Using PROC GPLOT

This tip utilises the REGEQN option available on the PLOT statement in PROC GPLOT allowing the regression equation to be printed below the graph. Without the availability of this option a PROC REG would have had to be run, sending the coefficients to an output data set and then setting up some macro variables for use in a footnote or using an annotate data set to include the regression equation with the graph.

Regression using REGEQN option



Regression Equation:
SALES = -97248.35 + 49.22051*YEAR

The following code uses the REGEQN option to place the equation with the graph.

```
-----*
* Description: Example Regression Plot using      *
* REGEQN option                                *
* Data Set   : sashelp.retail                    *
-----*

* Reset the graphics environment;
goptions reset = all
  device = win
  gunit = pct
  cback = gray
  ftext = swiss
  htitle = 6
  htext = 3
  display;
```

```

* Define title and footnotes;
title 'Regression using REGEQN option' ;

*-----*
* Define plot symbol and axes characteristics *
*-----*

Symbol1 Interpol = RLCLM99 /*Lin regr with 99% CIs*/
Value = star
Height = 3
CV = red /*-- Plot Symbol clr --*/
CI = blue /*-- Regr Line clr --*/
CO = green /*-- Conf Limits clr --*/
L = 1;

axis1 label=(a=90);
axis2 minor=none ;
*-----*
* Produce regression plot using REGEQN option to *
* print equation below the graph *
*-----*

proc gplot data=sashelp.retail ;
plot sales*year
/ REGEQN /*-- Put Equation on Graph --*/
vaxis=axis1
haxis=axis2 ;
run;
quit;

```

SAS Log:

```
NOTE: Regression equation : SALES = -97248.35 +
49.22051*YEAR.
```

SPS SAS Consultancy Team

Don't Be Greedy

A little performance and documentation tip: only read the variables that are needed from a data set - use the keep data set option. This can reduce the amount of data that is read from the disk and will reduce the amount of memory used. Additionally, it will be crystal clear to anybody reading your program which variables you are using from which input data set(s). Here's an example:

```

data result;
merge fred (keep=patno age refdate)
jim (keep=patno visit_d weight height);
by patno;
studyday = visit_d - refdate;
run;

```

You can immediately see in the example which variables came from which data sets - you do not need prior knowledge of the input data sets.

Andrew Ratcliffe

The Consultant

This part of VIEWS is where you can get your technical questions answered. Send your questions to the editor.

Submitting SCL Variables

Q: *I have never managed to fully understand when I can and when I can't use an SCL variable within code I am submitting from a SAS/AF application. Can you please give me some clear guidelines?*

A: There is often some confusion when using SCL variable substitution in submit blocks within SCL. Just because variable

substitution looks like a macro variable reference does not mean that it will not resolve if put in single quotes.

SCL variables will resolve irrespective of how they are quoted in a submit block. You can use either double or single quotes. Take a look at this example.

==> Example SCL

```

init:
name='Bond, James Bond' ;
submit continue ;
data _null_ ;
put 'My name is &name' ;
* Note: single quotes ;
run ;
endsubmit ;
return ;

==>> LOG

1 data _null_ ;
2 put 'The name is Bond, James Bond ' ;
3 * Note: single quotes ;
4 run;

```

```

The name is Bond, James Bond
NOTE: The DATA statement used 1.04 seconds.

```

Phil Mason

Formats from Data Sets

Q: *I have a large data set that contains information that I'd like as a SAS format. Please tell me I don't have to type it in by hand!*

A: You don't have to type it in by hand. When creating a SAS format, you usually use a PROC FORMAT statement followed by one or more VALUE statements. Instead, you can create formats directly from a data set by using a PROC FORMAT statement with the CNTLIN option. At its simplest, the input data set must have three variables:

FMTNAME - The eight character (or less) name of the format, including a dollar sign if it's character.

START - The unformatted value.

LABEL - The formatted value.

An example data set follows.

FMTNAME	START	LABEL
\$sex	M	Male
\$sex	F	Female
\$sex	U	Unknown

If your data set doesn't have the right variable names, you can rename them using data set options - see the following example:

```

proc format cntlin=in.codelist (rename=(fldid=fmtname
code=start
trans=label ) );
run;

```

Finally, if you already have a format but would like a data set containing the values, you can use the CNTLOUT parameter combined with a SELECT statement.

```

proc format cntlout=fmtdata;
select $sex;
run;

```

Andrew Ratcliffe

Diary

March 1998

22-23 SUGI 23 in Nashville, Tennessee, USA. The biggest SAS user group event. Contact SAS Institute for further information

June 1998

9-12 SEUGI 16 in Prague, Czech Republic. Europe's biggest SAS user group event. Contact SAS Institute for further information

Are you organising an event that would be of interest of the views readership? Let us know, we are interested in all non-profit making events related to SAS.

News

VIEWS 3

Those who were able to attend VIEWS 3 at the Paragon Hotel on Wednesday 12th November won't need telling what a success the event was. Sponsored by a raft of renowned IT suppliers, the conference featured 11 technical sessions, a demonstration area, sales stands, help desk, free T-shirts, and a free drink at the bar for all attendees.

The views committee is currently planning VIEWS 4. The event is scheduled for July 9th.

Andrew Ratcliffe

The VIEWS Web Site

If you're fortunate enough to have internet access, you should head straight for <http://www.views-uk.demon.co.uk> and check-out the VIEWS web site. It's still in a formative state at the moment, but bookmark it and make it a regular stopping-off point whilst surfing.

We are aiming for the VIEWS web site to become an invaluable repository of technical SAS information. Its content will range from technical papers, hints and tips, online copies of the views newsletter, and links to other useful sources of information. Plus, of course, details on VIEWS' latest events.

SPS kindly hosted our web site throughout our first year. It was always our desire to create and maintain our own site but we are grateful to Linda Clarke at SPS for the time effort she gave in maintaining our early web presence.

Andrew Ratcliffe

SAS Institute's Enterprise Miner Software Goes Beta

SAS Institute has released the beta version of Enterprise Miner software, a key step in delivering a complete data warehouse-based data-mining solution. Twenty-five companies will receive the beta initially. Customer-relationship management, credit-risk scoring, fraud detection, and market-basket analysis are just some of the data-mining applications Enterprise Miner software helps organisations complete with maximum accuracy.

To help business decision makers find trends hidden in huge volumes of corporate data, Enterprise Miner software combines SAS Institute's data warehousing technology with its analytical capabilities. The software includes a graphical user interface to automate the data-mining process.

"The data-warehouse component sets our data-mining product apart," said Mark Brown, SAS Institute's program manager for data mining. "The results you get from data mining are only good as the quality of the data you're mining, so a sound data-

warehousing strategy is strongly recommended. Another differentiator is that Enterprise Miner software bridges two very different worlds in every organisation - the business decision makers and the quantitative experts. This software lets both groups play to their respective strengths - while helping them to communicate clearly with each other, which leads to better-informed business decisions."

If you want to know more, try these web addresses:

<http://www.sas.com/new/preleases/010598/news1.html>

<http://www.sas.com/software/components/miner.html>

SUGI 23

The New Year is the time to think about booking your place at SUGI 23. Nashville, Tennessee is the place to be if you want to get early information on version 7 of the SAS System.

The conference kicks-off on the evening of Sunday 22nd March 1998 and finishes on Wednesday 25th. Contact SAS Institute for further information

Andrew Ratcliffe

SAS/IntrNet 1.1 Update

The kind folks at SAS Institute have updated their web site with the new version of the SAS/IntrNet Server, Broker and htmSQL.

Users on SAS-L have been banging away on the new version for a couple of months now. It looks pretty stable. A couple of pretty neat demos are out there for download. They have a new version of the xplore application which allows you to browse libraries, catalogs, data sets, MDDBs, summary data sets, etc. all from a web browser. Included in that is a pretty nifty example of how to download to MS-Excel while viewing a SAS data set. They also have a really cool what-if analysis example that allows the user to change some elements in a spreadsheet and watch the impact on a trend chart.

If you want to know more, try these web addresses:

<http://www.sas.com/new/preleases/120897/news2.html>

<http://www.sas.com/web>

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