



HARTFORD AREA SAS® USERS GROUP

Volume 18 Issue 2

Second Quarter, May 2006

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The HASUG Flash is available for reading on the World Wide Web at <http://www.hasug.org>
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Chairman's Notes

Rob Krajcik, Bristol-Myers Squibb

Considering that the meeting was held in a far corner of the state, we had a good turnout for our February 2006 meeting. Janet Stuelpner gave a thorough presentation on the basics of the Output Delivery System, and our NESUG speaker, Bob Virgile, presented "Macro Mania", a series of macro "gotchas" that make you want to learn macro coding all over again. The Macro Mania questions are still posted in the Newsletters section of the HASUG web site.

May is the time of the year that we elect, or re-elect, members to the Steering Committee. Elections are held at the May meeting. We are always looking for fresh ideas and new people to help out in planning the meeting topics and speakers. We meet after every quarterly meeting for lunch and a planning session. In between quarterly meetings we schedule a conference call to discuss the presentations, topics and sites for our future meetings. If you are interested in joining the Steering Committee, please speak to anyone on the steering committee. We encourage and welcome your participation.

In addition to the need for volunteers to join the Steering Committee, we always are looking for people to contribute to the HASUG Flash newsletter. If you have an article you would like to have considered for publication, please let me, or any of the committee members know and we will be glad to share appropriate items of interest with the HASUG community.

Also please take note of our website: <http://www.hasug.org>. We are always glad to take comments or suggestions. I look forward to seeing you all on May 18th at Bayer in West Haven!

HASUG MEETING ANNOUNCEMENT

Our next meeting is Thursday May 18th, 2006 at Bayer, Inc.

400 Morgan Lane, West Haven, CT 06512
from 9:00 am to noon

Our first speaker will be:

Robert Krajcik, Bristol-Myers Squibb
Calendars & calendar dates using SAS®

Calendars have been used for centuries as a means of scheduling religious and civil events, planning for agricultural seasons, and simply counting days. But have you ever wondered how our calendars evolved? Why do we have twelve months in a year, and seven days in a week? How did the weekdays get their names? And why October is the tenth month of the year instead of the eighth? How long is a year? The answer depends on which calendar you are using.

Rob will present a brief history of the Julian and Gregorian Calendars, compare them with some other calendars commonly in use today, and review some of the latest notes on processing dates using informat and format, and date functions such as INTCK and INTNX using SAS 9.1

Rob Krajcik has been working with SAS software since 1981 and has an extensive background in Information Technology. His interests include: Macro functions, SQL, ODS tagsets, eNDAs and eCTDs, CDISC topics, client-server applications, MS office applications using SAS, statistical graphics, web design and the SAS Enhanced Editor. He is a SAS Certified Base Programmer.

When not involved with work or HASUG, Rob enjoys hiking, long-distance bike riding, working out at the gym, downhill skiing and horseback riding.

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**Our second speaker will be:
Arun Sanjeev, Deloitte Consulting
Knowledge Discovery in Screening Data
Expedites Drug Discovery**

Discovering drugs is a very difficult and expensive process which can take many years. The process is mired with uncertainties that pharmaceutical companies strongly desire to increase the number of possibilities considered, expedite the overall process and yet minimize the risks involved. Screening plays the traditional seeding role in drug discovery. Up to 100K compounds can be tested in single day.

We show how informatics analysis can benefit from adhering to the framework prescribed for systems for knowledge discovery in databases (KDD) and following the guidelines which have emerged from successful KDD applications. Nonlinear models are fitted to high-throughput screening data to detect compounds which exhibit drug like behavior. Goodness-of-fit measures are computed and heuristic evaluations applied to rank thousands of fitted curves to assist scientists in their investigations. A notion of "analysis protocol" is used, which is an instruction set that defines data transformation steps, order in which they apply, models to try, parameter thresholds to use, and rules fitted curves must pass. Protocols when combined with data complete informatics analysis.

Arun Sanjeev is a Manager at Deloitte Consulting and has many years of experience in industry, academia, research and teaching. He is an invited contributor in the Handbook of Data Mining (Oxford University Press, 2000). He has authored numerous publications, delivered presentations, developed data mining systems and demonstrated them in international conferences.

Arun has broad data mining and project experience in many disciplines including chem and bio informatics in pharmaceuticals and life sciences; loss ratio modeling in insurance; marketing analytics, business intelligence in automotive, and consumer packaged goods industries; segmentation and pricing in hotel revenue management; institutional research in large universities; and delinquent behavior research in juvenile justice.

**February Meeting Highlights
Janet Stuelpner**

The February 2006 meeting of HASUG was held at Boehringer-Ingelheim in Ridgfield. We were very lucky to have good weather and a well attended meeting in the middle of the winter. The speakers were Janet Stuelpner speaking about the Output Delivery System (ODS) and Bob Virgile with his Macro Mania questions.

Janet's presentation was a basic overview ODS with lots of examples of the features. Janet started with a description of what the ODS is all about and slowly added features to show how complicated output can be created in a simple way. She just touched on the tip of the iceberg and gave us a place to start using this complex feature of SAS.

Bob Virgile gave us the macro questions in advance so that we could work on them before the meeting. At the meeting he went over each question and how to really understand the macro system in SAS works. He started with a simple example and showed different variations of what can be done with it. The questions are published on the HASUG web site, but (as he stated at the

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meeting), you need to catch his presentation to get the answers.

Many thanks to Boehringer-Ingelheim for hosting the meeting and providing the refreshments.

CALENDAR OF EVENTS

Future General Meetings & Conferences:

May 18, 2006 Bayer, West Haven, CT

August 10, 2006
Central CT State University,
New Britain, CT

Sept 17-20, 2006 NESUG,
Philadelphia, PA

HASUG Steering Committee Meetings:

May 18, 2006

Immediately after HASUG meeting

June 15, 2006

conference call, 11:30-12:30

August 10, 2006

Immediately after HASUG meeting

September 14, 2006

conference call, 11:30-12:30

BOOK REVIEW

By Charles Patridge,
Full Capture Solutions

Title: Sharpening Your SAS Skills

Author: Sunil Gupta and Curt Edmonds

Publisher: Chapman & Hall/CRC Press

ISBN: 1584885017

Pages: 273

Price: \$59.95 (amazon.com)

This book is worth reading by all levels of SAS programmers, but especially for the beginner up to the intermediate levels. You

should have some experience using the SAS software before picking up this book. It provides concise explanations, helpful examples and a nice summary section at the end of all six chapters with the added benefit of some comprehensive questions with answers provided at the end of the book. Another added feature of this book for those who have not used SAS V9 or V8, is a section on the enhancements to these two SAS versions which should be helpful to those who have not had much experience with the new enhancements.

In reading this book, I uncovered a few new features of SAS of which I was unaware and immediately began to use these features in my new code.

This book is NOT intended to be a reference manual but it can easily be read over several days and is helpful as a refresher course to reinforce your basic knowledge of SAS. It also provides a great presentation and explanation of the PDV which I have not found in other books by SAS users. This is a book worth having in your SAS library to share with the rest of your staff who use the SAS Software.

Continuing With Education... Peter Prause, The Hartford

SAS Institute Regional Training Center in Glastonbury, CT is offering the following courses. Course information for these courses and many other non-local courses is available on the Internet at the SAS web site: support.sas.com. To register for a course or to get more information, phone SAS Institute at 1-800-333-7660.

Glastonbury Class Schedule

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SAS Macro Language	May 3 – 4
SAS Macro Programming: Advanced Topics	May 5
SAS Programming I: Essentials	May 22 – 24
SAS Programming II: Manipulating Data with the DATA Step	May 31 - Jun 2
Querying and Reporting Using SAS Enterprise Guide	Jun 8 – 9
SQL Processing with SAS	Jun 15 – 16
SAS Programming I: Essentials	Jul 26 – 28
Creating, Distributing, and Using SAS Stored Processes	Aug 10 – 11
SAS Programming II: Manipulating Data with the DATA Step	Aug 28 – 30
SAS Programming I: Essentials	Sep 27 – 29
Creating Detail and Summary Reports	Oct 4 – 6
SAS Programming III: Advanced Techniques	Oct 18 – 20
SAS Macro Language	Nov 1 – 2
SAS Macro Programming: Advanced Topics	Nov 3
SAS Programming I: Essentials	Nov 15 - 17
SAS Programming II: Manipulating Data with the DATA Step	Nov 29 – Dec 1
Querying and Reporting Using SAS Enterprise Guide	Dec 7 - 8
SQL Processing with SAS	Dec 14 – 15

When time and distance are an issue for you, SAS Institute offers live web classes and self-paced e-learning to help you get the training you need while accommodating your busy schedule. Call SAS for more details.

Destiny Corporation is offering the following public courses at their training facility located at 2075 Silas Deane Highway, Rocky Hill, CT. You can reach Destiny at 1-800-787-2464 or at 860-721-1684, or send email to info@destinycorp.com. You can visit their web site at www.destinycorp.com.

Programming I: SAS Essentials May 3 – 5
Enterprise Guide:
Querying and Reporting May 15 – 16
Report Writing: A Programming
Approach in SAS Software Jun 5 – 7
SQL Processing in SAS Software Jun 8 – 9

Output Delivery System:
(ODS) Basics Jun 19 – 20

In addition to Destiny’s public course offerings, many of Destiny’s courses are offered in a Virtual Learning Environment. Experience the quality and benefits of “Instructor Led” training from the comfort of your own PC. These courses cover the same basic content as traditional classroom training with the benefit of year long access and instructor support. Call or visit www.vdestiny.com for more details.

THE HASUG RECRUITING POLICY

HASUG’s primary mission is to provide a forum for SAS professionals to meet and share experiences. HASUG also recognizes that searching for new employment opportunities is a normal activity when professionals meet. Since we depend on our respective employers to support HASUG by providing time for members to attend, prepare presentations, and provide meeting facilities, we do not wish to jeopardize those

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relationships we have all nurtured.

Therefore, when attending any of our quarterly meetings, we request that all parties engaged in recruiting activities be "professional and discreet", and suggest that such activities be carried outside and after our meetings. Those seeking or offering positions may display materials at a location designated by HASUG at each quarterly meeting. The materials may include resumes, job openings, contract opportunities, business cards, etc. None of the materials may include salary information. All such materials left after the meeting will be discarded. Violators of this policy may be asked to leave the meeting.

THE HASUG SPONSORSHIP POLICY

All parties are encouraged and welcome to attend our quarterly HASUG meetings scheduled during the months of February, May, August, and November of each year. Usually these meetings are scheduled the 3rd Thursday from 9:00 am to noon at various locations throughout Connecticut. Past locations have included Hartford, Meriden, Middletown, Norwalk, Glastonbury, Stamford and New Haven. We are always looking for new hosts within the state of Connecticut. If you feel your organization can host a meeting of up to 70 or so people, please contact one of the Steering committee members.

HASUG2-L DISTRIBUTION LIST

This service is provided free of charge to all who wish to subscribe to the email notification process. In order to sign up for this service, you need only point your browser to the HASUG web site, <http://www.hasug.org>, and click the hyperlink:

[Join HASUG Email Distribution List](#)

Or go directly to

<http://listserv.pace.edu/archives/hasug2-1.html>

then click on

[Join or leave the list \(or change settings\)](#)

After entering your name and e-mail address, there are a number of options available under "Subscription Type". If you know and understand the various options, feel free to alter them as desired. However, HASUG suggests you leave them "as is".

Your name and email address are not displayed nor given out to any party, including members of the HASUG steering committee. Only the list administrators have access to subscription information.

If you should change your email address under which you subscribed, you will need to unsubscribe with your old email address, and then re-subscribe using your new email address.

Typically, a notice is sent approximately 3 weeks before meetings, as well as a couple of days beforehand to remind people of the date, time, location and topics to be presented.

Only List administrators will be able to send out email messages to the HASUG2-L members.

CONSULTANTS' SPECIAL INTEREST GROUP (SCONSIG)

The SAS Consultants' Special Interest Group (SCONSIG) operates and maintains a web site located at www.sconsig.com. The site lists employment opportunities, contracts, vitas, resumes, and companies seeking SAS professional talent. It is updated weekly. You are encouraged to visit that web site or to contact Charles Patridge at:

[Charles S Patridge@prodigy.net](mailto:Charles_S_Patridge@prodigy.net)

The Many Views of SUGI
Edited by Janet Stuelpner

Barbara Moss, Cigna Healthcare

Those fortunate enough to arrive early in San Francisco were treated to sunshine and hopefully found time to enjoy an entertaining cable car ride, perhaps a bike trip across the Golden Gate Bridge, or a tour of the city. The conference giveaways of an umbrella and a long sleeve tee shirt ended up being way too useful for the cool, rainy days of SUGI. The city had much to see and do and the people were so helpful and friendly, that the conference and location were very enjoyable.

At the opening session Rick Langston flew through an amusing tale of the past 30 years of SAS. From the number of lines of code to the number of buildings in Cary; from the number of SAS Institute employees (from 7 to 10,000) to the number of SUGI attendees (from 60 to nearly 4200), it was fun to hear the facts.

After spending time last year at SUGI trying to navigate through the marketing words to understand what functionality was actually included in the many iterations of packaging, I thought this year was a little bit clearer from that perspective. There was more focus on utility and purpose. This year's hot items seemed to be the Load Sharing Facility, a tool for managing job distribution to maximize use of various hardware and platforms, SAS Web Report Studio, a front end for end users, and SAS Add-In for Microsoft Office, an easy route to SAS data for those content in Excel.

Tim Muir, Boehringer-Ingelheim

SAS Users' Group International (SUGI) Conference involves the presentation of new algorithms, software enhancements, previews of future releases, success stories, birds of feather forums, hands-on training, opportunities to speak with hardware vendors on different topics or solutions, and opportunities to speak with developers of various SAS products and components. The name of the conference is changing, beginning next year. It will now be known as SAS Global Forum, but the content will be unchanged.

This year the main focus was on previewing new releases of certain products. These are primarily components of the SAS Business Intelligence platform, which Boehringer has licensed for R&D+M. Some of these are slated for release almost immediately, while others won't appear until the next major release. Slated for the April release is Enterprise Guide (EG) version 4.1 (along with Service Pack 4). Enhancements include improved process flows that allow dependencies to be set, a LIBNAME definition wizard, improved query building, and an improved application layout.

Because there's so many presentations going on at any one time (Applications Development, Coder's Corner, Data Mining/Predictive Modeling, Data Presentation, Data Warehousing, Hands-on Workshops, Planning/Development/Support, Posters, Statistics/Data Analysis, Systems Architecture, and Tutorials), its hard to pick and choose. Thankfully, the conference proceedings are always available and searchable on-line.

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SUGI 31 continued:

You're invited to take a look at:

<http://support.sas.com/events/sasglobalforum/previous/index.html>

View highlight clips at:

http://www.sas.com/apps/webnet/navigate.jsp?c=SUGI31_00

Janet Stuelpner, Left Hand Computing

San Francisco is a great location for a conference. There are a great number of restaurants in which to dine and lots of places to go and do things. Of course, we were all in Northern California during a time where they broke the record for the largest number of days of rain in the month of March. It put a bit of a damper on walking back and forth from the hotels to the convention center, but it didn't stop the festivities.

SUGI is a wonderful conference for the opportunity to network with fellow SAS programmers. The presentations are informative and you can walk away with some concrete examples to use in your own programming tasks. However, the ability to talk to programmers at all levels and find out how they are using the product is the most valuable part of the conference to me. Since the end of the conference, I received several emails with code and macros that I can use. I spoke to people in my own industry and other industries to learn more about the simple ways to use procedures and formats and the more complicated macros and functions.

HYPERLINKS OF INTEREST

SAS Users often ask, "How can I find any recent SUGI papers that deal with a particular subject?" Lex Jansen has put up the following link that lets one search the online SUGI proceeds using the Google search engine:

<http://www.lexjansen.com/sugi/>

Similarly, to search the SAS-L archives, one can use the following two links:

<http://www.axomsoftware.com/sas-l.php>

<http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&group=comp.soft-sys.sas>

Read Past SUGI Proceedings Online at:
(link supplied by Curtis Smith):

<http://support.sas.com/usergroups/sugi/proceedings/index.html>

Information about the North East SAS Users Group (NESUG), including information about the 2006 conference in Philadelphia can be found at:

<http://www.nesug.org>

SAS OnlineDoc is available from SAS on the World-Wide Web. To register to view SAS Version 8 OnlineDoc on the web, register at the following URL:

<http://www.sas.com/v8doc>.

To register to view SAS Version 9 Online Doc on the web, register at the following URL:

<http://www.sas.com/v9doc>.

Some of the papers and other handouts distributed at recent HASUG meetings can be found at the following two web sites:

<http://www.hasug.org>

TIPS AND TECHNIQUES

The following tips and techniques can be viewed on www.sconsig.com website under Tips and Techniques.

[Parsing a Macro Variable String -- Rob Krajcik](#)

[Using the Proc SQL Method Option by Kirk Lafler](#)

TIP00414 -What happens when you try to pass Macro special symbols such as % and & inside the values of macro variables when you want to treat them as normal alpha characters by Charles Patridge

-- FAQ: How Can I Create an Autocall Macro Library on the PC?

An autocall library on the PC is simply a directory that contains noncompiled macro code.

Read More at:

<http://support.sas.com/faq/044/FAQ04465.html?ETS=4725&PID=44951>

-- Finding an Error in Macro Variable Resolution in Open Code by Using the %PUT Statement

This example shows how to use %PUT statements to display macro variable values and messages in the SAS log. These statements help identify problems in creating a macro variable.

Read More at:

<http://support.sas.com/ctx/samples/index.jsp?sid=777&ETS=4725&PID=44951>

-- New Argument for Use with the COMPRESS Function

The COMPRESS function allows you to remove selected characters from a character value.

Read More at:

<http://support.sas.com/ctx/samples/index.jsp?sid=823&ETS=4725&PID=44951>

-- FAQ: How Can I Download an Excel File from an ODS HTML Web Page?

You can place a download button on the HTML page that enables the reader to save the page as an Excel file.

Read More at:

<http://support.sas.com/faq/036/FAQ03644.html?ETS=4725&PID=44951>

-- FAQ: How Can I Use PROC REPORT to Link from One Page in my PDF File to Another?

In SAS®9 and later, the ANCHOR= statement inserts anchors into an ODS PDF output file. You can use PROC REPORT with CALL DEFINE to automate the process of linking to the anchored pages.

Read More at:

<http://support.sas.com/faq/044/FAQ04473.html?ETS=4725&PID=44951>

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-- List All .SAS Files that are Located in a Specific Directory
Read on for the code from this highly popular SAS tip.

Read More at:

<http://support.sas.com/ctx/samples/index.jsp?sid=588&ETS=4725&PID=44951>

TIP00413 -Adapted the List ALL .SAS files (above) so the list is saved in a SAS Dataset for processing instead of just putting them to the log by Charles Patridge

/**** TIP000414 *****/

/*** What happens when you try to pass Macro special symbols such as
% and & inside the values of macro variables when you want to
treat them as normal alpha characters

When you deal with character data that can contain almost everything under
the sun, you will probably encounter this someday down the line. ***/

```
45 data test;
46 Lookup_string = '100%ON';
47 call symput( 'Lookup', lookup_string);
48 run;
49
50 PROC SQL noprint;
51 Create table test as
52 Select *
53 From mylib.table_lookup
54 Where 0 < index( Master_String, "&Lookup" );
ERROR: Macro keyword ON is not yet implemented.
```

NOTE: Compressing data set WORK.TEST increased size by 100.00 percent.

Compressed is 2 pages; un-compressed would require 1 pages.

NOTE: Table WORK.TEST created, with 1 rows and 6 columns.

55 Quit;

NOTE: The SAS System stopped processing this step because of errors.

NOTE: PROCEDURE SQL used (Total process time):

real time	0.07 seconds	cpu time	0.07 seconds
-----------	--------------	----------	--------------

[The Fix for this problem is to use %SUPERQ](#)

```
58 PROC SQL noprint;
59 Create table test as
60 Select *
61 From mylib.table_lookup
62 Where 0 < index\( Master\_String, "%superq\(Lookup\)" \);
NOTE: Compressing data set WORK.TEST increased size by 100.00 percent.
Compressed is 2 pages; un-compressed would require 1 pages.
NOTE: Table WORK.TEST created, with 1 rows and 6 columns.
63 Quit;
/**** end of tip 00414 *****/
```

Hartford SAS Users Group Steering Committee

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**Directions to:
Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, Connecticut 06512**

Driving From New York (I-95 North):

- **Take Exit 41 (Marsh Hill Road Exit).**
- **At end of exit you will find a traffic light and directly across the street is the entrance to Bayer Pharmaceuticals Corporation on Frontage Road.**
- **Follow to the end, staying to the right (do not re-enter I-95!) until you reach the Visitor's Center.**
- **Proceed to security building for shuttle bus transportation.**

Driving From New Haven (I-95 South):

- **Take Exit 41 (Marsh Hill Road Exit).**
- **At the end of the exit ramp turn left at the traffic light onto Marsh Hill Road.**
- **Go over on the bridge over I-95. Look for the Bayer Pharmaceuticals Corporation sign on the left..**
- **Turn left at the traffic light onto Frontage Road..**
- **Follow to the end, staying to the right (do not re-enter I-95!) until you reach the Visitor's Center.**
- **Proceed to security building for shuttle bus transportation.**

