

Cruncher



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New Catalogue

We enclosed a copy of our new catalogue with this newsletter. We hope you find it to be useful. This version of our catalogue gives a brief overview of our main products, and tells you the locations of web pages that contain much more detail than is sensible to put on paper. The web pages also contain links to slide shows and movies that demonstrate what the software does.

If you are a member of a professional body whose members might benefit by receiving a copy of the catalogue, please let Aandrea@hrs.co.nz know who to contact about paying the society for the privilege of distributing it. If you have any comments about the catalogue, please send them to Aandrea@hrs.co.nz.

Exchange rates

We are able to hold our prices of SPSS BI products (SPSS, AnswerTree etc) against the exchange rate shifts, but prices for products that we pay for in US dollars will have to be increased. As we have done previously under similar circumstances, we will bring the price down as the exchange rate moves up again. Our quotes will be valid for a maximum of 14 days while the exchange rate continues to fluctuate rapidly.

Windows 2000

We have had a number of cases of distressed users who installed Windows 2000 on their computer only to find their software no longer works. It is not safe to assume that software developed before Windows 2000 was available will work on this operating system. Upgrades and new versions are normally certified for W2K, but if you have older versions of our software you should go to the appropriate product page on the HRS web site and check whether Windows 2000 is listed as an operating system for that product.

Cruncher by email

Last issue we invited people to tell us if they would prefer to receive their Cruncher by email. We thank those who responded, but only a tiny fraction of our 7000 customers said they wanted it this way. We have contacted them, but the rest of you will have to enter at least one URL if you want to connect in to the hyperlinks of this issue. To get this Cruncher by automated email send mail to sendcrun@hrs.co.nz. (No subject or contents is needed) To read the Cruncher on our web site go to www.hrs.co.nz/cruncher.html.

NZSA student prize

For several years now, HRS with SPSS has donated \$1000 to the NZ Statistics Association for a prize, to be awarded as they see fit. This year, the whole amount went to Arier Lee, an Auckland University student, for her paper on "Modelling of mean platelet volume". Well done Arier! Read the paper at <http://at.yorku.ca/cgi-bin/amca/cadt-08>.

MATLAB sales conference

Marc and Ray went to Taiwan for sales training on version 6 of MATLAB. It will be a little while before it is released, but users on the subscription plan can download a pre-release version at no charge. We are excited by the improved interface, which gives new users a more friendly starting point to their calculating. In addition, many toolboxes have significant improvements.

MRS Awards

The Market Research Society Effectiveness Awards highlighted the role that effective and creative research plays in helping business and social organisations reach their goals. To do this researchers and their clients had to demonstrate to judges how their research programme or projects have contributed to successful outcomes. SPSS was a major sponsor, in the area of Fast Moving Consumer Goods/Consumer Durables, and this award was won by Focus Research working for Tip Top Ice Cream.

If anyone remains to be convinced about the practical usefulness of research, the stories associated with the more than 30 entries will dispel any doubts. Some stories have been printed in the October issue of Marketing magazine, and we expect more to be in the November one.

Business Software

SYSTAT graphs within SAS.

SYSTAT, one of the statistics programs made by SPSS, has always been developed with one eye on SAS. The latest manifestation of this is the announcement of GraphExpress. This product installs a set of toolbars into the SAS software for Windows environment in order to give users access to the publication quality graphs that have long been available to SYSTAT users. You specify them by using point and click dialog boxes and option boxes, just like SYSTAT users do, but using your SAS variables.

- Choose from over 20 toolbar buttons to create customized graphs
- Easily edit your graphs and add them to your MS Word documents, PowerPoint presentations and web pages.
- Create scripts to use in your production jobs.
- Instantly visualize your SAS statistical analysis using SYSTAT diagnostic plots.
- Use the Graph Gallery to create graph templates to give your graphs a consistent look.

You need SAS version 8, SAS/STAT, and SAS/GRAPH to use GraphExpress. Contact Glen@hrs.co.nz.

SPSS for Macintosh

Mac users can now buy the latest version of SPSS and run it directly, instead of by Windows emulation. It is just like the Windows version, except there is no Exact Tests or Maps module. Stocks have not yet arrived, but when they do we will supply copies to the co-ordinators at all the Universities with academic site licenses. You can download a specification sheet at <http://www.hrs.co.nz/more/spss.htm>. Ask for availability details at Glen@hrs.co.nz.

SPSS algorithms

Often people ask us how SPSS calculates the results it presents. You can buy the book, but you can also read about the algorithms on-line at www.spss.com/tech/stat/Algorithms.htm.

DeltaGraph 5.0

This leading data graphing product gives you a redesigned interface, totally compatible with Windows and Microsoft standards. There are more data exchange facilities, and eleven new chart types. You can go right to press with the Pantone matching system. See <http://www.spss.com/deltagraph/windows/features.htm> for new features.

Remark Office OMR 5.0

This upgrade to our leading form-reading product has now been released, and has a much-improved interface, that makes it easier to set up the templates that define where the data is located on the page. It has a few refinements in the actual data capture, including an automatic document skew correction feature that will reduce the number of scanning errors. To upgrade will cost about \$500 (this depends on the exchange rate). Contact Glen@hrs.co.nz for a quote.

Financial Engineering News

This is the name of a bi-monthly newspaper, which focuses on financial engineering computer software for risk management and measurement, investment and money management, trading asset and liability management, structured finance, treasury and energy trading. It is blatantly commercial, with exhortations and reviews of all the common software, but it also has extensive user stories that show where the programmes are useful. See back issues on-line at www.fenews.com.

MATLAB Financial Derivatives toolbox

The Financial Derivatives Toolbox builds on the MATLAB Financial Toolbox in the areas of fixed income derivatives and securities, contingent on interest rates.

The toolbox provides components to analyse interest rate derivative instruments and portfolios. It allows you to calculate prices and sensitivities of derivatives, perform hedging analyses, and visualise the results. Contact Marc@hrs.co.nz.

Use @RISK 4.0.5 in VBA

This free update for all @RISK 4 users greatly expands the library of Excel VBA macro commands for @RISK. Now, you can write your own custom applications in Excel that can perform virtually any @RISK function. Harness the power of @RISK's Monte Carlo simulation engine for your company's specific needs. Utilise @RISK's sharp reporting options, sensitivity analysis, scenario analysis, distribution fitting, and more, all in your own custom Excel program!

SPSS hint Seven.

Sometimes you want to drop variables from a dataset. It is easy to do this by hand, but the syntax is obscure. Use
**MATCH FILE FILE=*
/DROP=OLDVARI
OLDVAR2.**

SPSS hint eight

A client had built up an Access database, in which the main table stored question responses as codes, and other tables stored labels for those codes.

We used ODBC to make an SPSS file from the main table. By copying from Access and pasting to an SPSS syntax window we were able to make a syntax file that took the labels from Access and applied them in the SPSS file. The syntax command is
VALUE LABELS. See www.hrs.co.nz/analysis/spsslabels.pdf for a full description of the method.

Science and Engineering software

SYSTAT 10

This product was announced at the Joint Statistical Meeting 2000, in August. The main feature is the GraphExpress link to SAS, also available separately and described on page 2. SYSTAT 10 also includes some new statistics capabilities, including Mixed Regression and Power Analysis, as well as a broad range of user interface enhancements.

We are not yet able to supply this product, but we are "grandfathering" it – if you buy SYSTAT 9, we will upgrade to version 10 when it is released, at no cost to you. Write to Glen@hrs.co.nz for more details.

Mathcad CSD Pack

This new Communications System Design Pack from MathSoft allows you to model and simulate dynamic signal systems. The Pack is built around VisSim/Comm 4.5 PE from Visual Solutions, which features an intuitive drag-and-drop block diagram interface and a powerful simulation engine. Users can select from more than 180 block diagrams and wire them together using point-and-click commands. You can use Mathcad to make your own blocks. The time-domain simulation engine provides fast and accurate solutions for linear, nonlinear, continuous time, discrete time, time varying and hybrid system designs.

The pack also includes the signal processing, image processing and wavelets extension packs for Mathcad. Write to Marc@hrs.co.nz for details.

MATLAB Student version.

Many students buy the Student Edition of MATLAB, published by Prentice-Hall. Details are not finalised yet, but it appears that next year this product will not be available. If you are planning courses for which students need to have their own software then please contact Marc@hrs.co.nz to find out what will be offered instead.

Do maths in VB

The MathWorks have just released a product called MatrixVB, which is a COM library of matrix math functions for Microsoft Visual Basic, making the Visual Basic environment an easy-to-use scientific development environment. It is based on the code underlying MATLAB, but it does not require MATLAB to run. The library provides routines for one- and two-dimensional fast Fourier transforms, a linear equations solver, a singular value decomposition function, linear and quadratic optimisers, algorithms to solve and fit polynomials, filtering functions, several random number generators, and much more. (More than 600 functions!) Go to <http://www.mathworks.com/products/matrixvb/> for more information, or write to Marc@hrs.co.nz.

How a MATLAB user sees Mathcad

Matt Cribb at the Boeing Company says "These 'mini-analysis' often reoccur in my line of work and need to be documented. In which case I open my Mathcad document change a few values (make sure the numbers with custom units update), and print. Voila, it's self documenting! The analysis is my documentation; this is a nice feature in the process (memo) driven environment I work in. Moreover, it is very easy for my supervisors to approve my work without any knowledge of how to use Mathcad because the equations are close to standard mathematical notation. Again, the very equations in my document are doing the calculations (reduces errors of calculating something and documenting something else)!"

Mathcad in engineering education

Mick Pender at University of Auckland said "I am totally convinced that Mathcad offers a wonderful environment for doing the type of design calculations we set civil engineering students (I suspect that it would work for the other engineering departments as well)."

Professor Colin Campbell, from University of Waterloo in Canada, is trying to set up a single Mathcad site license for all Canadian universities! For resources and slide shows that demonstrate his ideas, go to <http://www.ist.uwaterloo.ca/ic/mathcad/>. Note that 19 courses at U of W (home of Maple) use Mathcad.

Maple animates Antz

The movie Antz had spectacular visual effects. Some of these were created mathematically, using Maple. Shawn Neely, of PDI who created these images says "...occasionally we bump into some hard mathematical problems. We use Maple as a powerful tool to crack some of those. It's kind of a big gun."

Electromagnetics analysis software

We hope to bring to our customers the REMCOM line of tools for calculating electromagnetic fields, in areas from antenna design to biological effects. If you want to be kept informed of the products and availability then please let Marc@hrs.co.nz know. You can go to www.remcom.com for some background. We expect to be able to release details on new products shortly.

ChemOffice 2001

We expect this new version of our premier chemistry software to be announced by the time you receive this newsletter. You can get details at <http://www.hrs.co.nz/more/chemoffice.htm>. The structure drawing, visualisation, property calculation and database searching components of this suite all have important improvements. We have been warned that the price will increase at the start of next year!

If you need any of our chemistry products, please contact Marc@hrs.co.nz.

MATLAB for the Macintosh?

TMW have invited us to canvass opinion on the importance of bringing MATLAB up to date on the Macintosh platform. If you have a strong opinion on this, please send it to Marc@hrs.co.nz so we can pass it on to the right person.

Training and seminars

On-line seminars

The Math Works is creating many movies and slide shows that act as on-line seminars to introduce clients to the general principles of the MATLAB range of products. Some of these use only the facilities of your basic browser, while others use Flash technology, and require you to install a free extension to your browser. Although many of them are easily found on <http://www.mathworks.com/>, we can also direct you to others.

If you are involved in DSP then ask us for the link to the Stuart McGarrity seminar – it is a great demonstration of system-level design.

Training

The wide range of training options we offer is hard to find on our web site right now. Until the web site is redesigned in the next month or so the URL will be <http://www.hrs.co.nz/services/training.html>. Most of our training is done in your offices, with your data – see the above web page for the options that are available.

Support yourself

Several of our products have databases that you can go to if you get an error message and need to fix something. SPSS users (any product) can go to <http://www.spss.com/tech/answer/index.cfm>, which allows you to search a database in several ways. We usually choose the product, and then search for the error message. Mathcad has a search engine at <http://www.mathsoft.com/support/>

Mathcad Seminars

There is only one more Mathcad seminar this year, in Auckland on 29 November. Come and see why engineers around the world use it every day for doing and documenting calculations. You can enrol on our web site at www.hrs.co.nz/responses/genone.html, or send us an email at Marc@hrs.co.nz. We are expecting to do a different style of mathematics seminar next year. We have our own thoughts but Marc would be pleased to hear yours.

SPSS Seminars

There is only one more SPSS seminar this year, in Auckland on 29 November. It will demonstrate tools for doing market research and analysing databases. You can enrol on our web site at www.hrs.co.nz/responses/genone.html, or send us an email at Glen@hrs.co.nz. Next year we will take an entirely new approach to data analysis seminars. We have our own thoughts but Glen would be pleased to hear yours.

<http://www.mathworks.com/support/>. MATLAB users can go to <http://www.mathworks.com/support/>.

We are happy to help you with any problems, but when you find answers on-line you save the time taken to explain the problem to us and waiting for an answer.

If you prefer, please phone us on 0800 477 776. Often, it is best to send an example of your problem as an email attachment, to support@hrs.co.nz. This can avoid time-wasting misunderstandings.

Bits and Pieces

Staff changes

We are pleased to have appointed Marc Brienne as the new product manager for mathematics software. He brings up-to-date engineering skills to HRS, and I am sure our customers will benefit from this. We are giving him an intense introduction to MATLAB - on his second day Marc flew with Ray to Taiwan for MATLAB training, and in his eighth week he is off to Melbourne for the MATLAB users conference.

He has had the benefit of being trained by

Cherie, who has helped many of you in the last few months. Cherie is now moving on to other activities, having given much more time to us than she was expecting when she offered to fill in on a temporary basis. Thank you Cherie.

News

We send you the Cruncher about 3-4 times per year. In between times there are lots of things happening, which you can check out on <http://www.hrs.co.nz/news.html>.

Contacting HRS

We are based in Hamilton, but supply, support and demonstrate our products around NZ as needed.

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We hope you found this issue of the Cruncher to be useful.

The last one was in August, 2000.

If you have colleagues who could benefit from a personal copy of the Cruncher and our Software Guide, please get them to contact us.