GAUSS

Expanding Probabilities

What is GAUSS?

GAUSS is a fast and powerful software package featuring a highly adaptive suite of analytical tools. Its flexible, full-featured matrix language, intuitive interfaces and powerful applications enable swift transformation of data and ideas into action.

The GAUSS Engine allows you to seamlessly integrate the power of GAUSS directly with Java, web-applications, C/C++ programs and more.

The analytics you need...

Quickly compute large datasets and complex models with efficient data organization, management, analysis and publication quality presentation.

> Univariate, multivariate, panel series, cross-sectional and time series analysis.

> Pre-written, customizable, classical regression analysis tools with the framework for conducting modern regression analysis including:

- Time-varying parameters
- Markov-Switching models
- Bayesian analysis
- DSGE models

...in a modern, fully interactive environment.

The GAUSS user interface provides a fully-featured environment with top of the line graphics that make it easy to interact with your data and models. GAUSS enhances outcomes and learning with numerous tools that provide immediate feedback in every step of algorithm development.

GAUSS has features that let users:

> Pause and view data as changes occur and make adjustments as needed.

> Navigate between customized views with a single click.

> Open the help page for a function with just one keystroke.

> Maximize workflow with autocomplete and function tooltips.

> Run any section of a program line-by-line with a new, easy-to-use debugger that provides an organized view of all variables, program output and more.

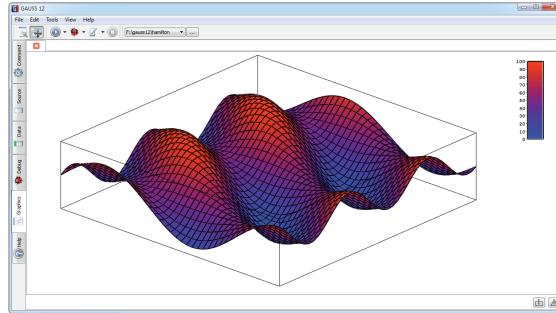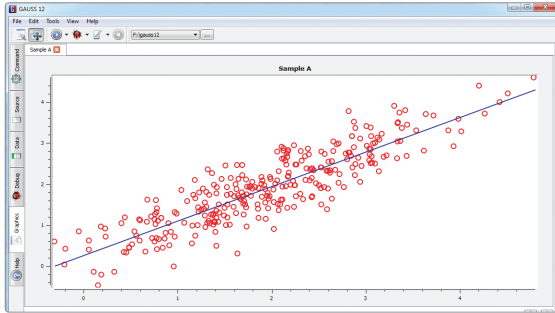### > Supported by a community of helpful experts.

We believe exceptional software should be supported by exceptional service, which is why we actively engage with and support our user community. Aptech's dedicated experts are readily available to address user questions or concerns and provide timely responses to help resolve any issues as quickly as possible.

A Mathematical &
Statistical System by

APTECH

> In any complex mathematical computation, only the most sophisticated analytical software can make it easy to construct elegant, customized equations and discover profound real-world implications for a new and deeper understanding of one's field and the world.

Industry Solutions

Professionals in many data-driven disciplines depend on the robust, adaptable power of GAUSS to create, test and execute complex analytical models that have important, real-world implications for business, science and society at large.

Known for providing specialized models, techniques and applications, GAUSS is also a comprehensive environment with everything you need to efficiently handle the most complex statistical projects and generate publication quality graphics.

GAUSS is ideal for rapid prototyping as well as complete implementation of a wide range of scientific and business models. All functions and programs can be altered by the user and easily integrated with C/C++, Java, FORTRAN and other environments, making GAUSS a fast and flexible solution for diverse industries.

- > Econometrics
- > Finance
- > Epidemiology
- > Engineering / Physics
- > Social Science

Applications

GAUSS is designed to be easy and intuitive enough for even novice users to achieve high quality results quickly, but there are also a wide range of available applications that leverage the extensive adaptability of the system to push the boundaries even farther.

- > Algorithmic Derivatives
- > Bayesian Estimation Tools
- > Constrained Maximum Likelihood
- > Constrained Optimization
- > CurveFit
- > FANPAC
- > Descriptive Statistics
- > Discrete Choice
- > Linear Programming
- > Linear Regression
- > Loglinear Analysis
- > Maximum Likelihood
- > Nonlinear Equations
- > Optimization
- > Time Series