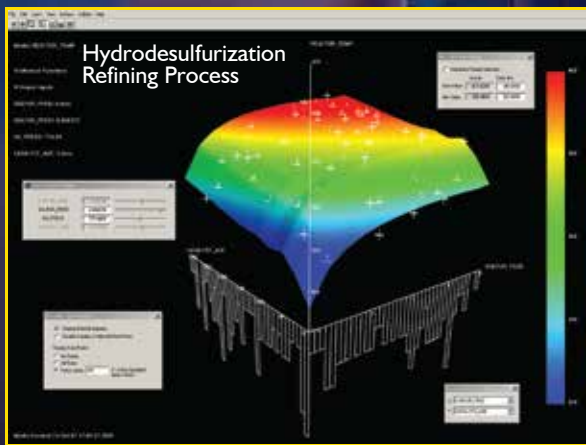


DATASCAPE Advantages

- A powerful new level of modeling sophistication in an easy to use package
- Visualization tools improve your understanding of the data and model
- Requires no hypothesis about the mathematical form of the solution
- Provides valuable insight by ranking the inputs that drive the model
- Identifies conflicting or bad data



- Flexible deployment options:
 - Embedded Systems
 - Standalone Applications
 - Excel Add-In Functions
- Enables a new class of real-time applications that are:
 - Compact – Smaller than lookup tables
 - Fast – Millions of predictions per second
 - Easily Updated – Coefficient representation
 - Accurate – Easily validated solution

Applications

DATASCAPE has been applied to an extensive range of applications including:

Prognostic Health Management
Developing and Embedding Soft Sensors
Quality Control Optimization
Hazardous Material Exposure Modeling
Customer Usage / Demand Modeling
Efficient Prediction of Chemical Reactions
Real-Time Process Control
Service Life Modeling
Spare Part Management
Simulation Acceleration
Lookup Table Replacement
Complex Fault Detection
Cost / Risk Modeling
Production Rate Studies
Maximizing Process Yield
Finding Key Process Drivers
Mining Data for Process Insight
System Performance Modeling
Price Justification Analysis
Modeling Software Development Costs

Contact **TMP** to learn how
DATASCAPE
can put your data to work for you...

(817) 820-0520
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DATASCAPE®

It's time to put your data to work for you...

DATASCAPE simplifies modeling
by creating a powerful predictive
tool from your data.



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DATASCAPE Overview

Quickly construct models that capture the complex behavior of your process data.

DATASCAPE develops an accurate predictive model by *learning* from the relationships it finds hidden in your numerical data.



Once the model is built, you can use it to:

- Optimize or control a process
- Make predictions based on historical data
- Gain valuable insight
- Replace a slow simulation with a fast and accurate model

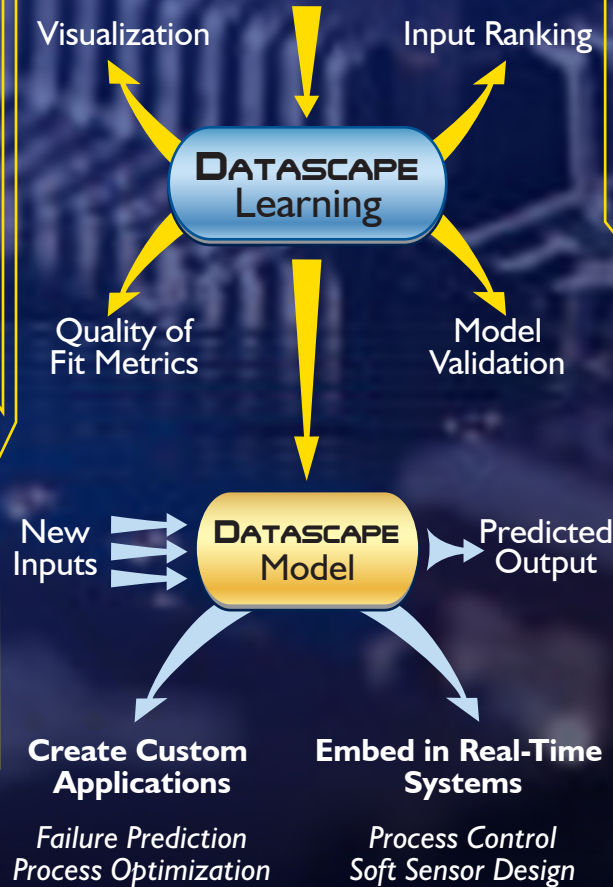
DATASCAPE is ideal for applications in areas where even experts could only guess at a starting point for model development.

The DATASCAPE Process

Acquired Data - Sensor Logs, Process Metrics, Custom Behavior, Simulation Output, etc.

Training Data File

```
S_FEED S_PROD H2_PRESS CAT_AGE TEMP
0.978277, 0.084763, 360.375763, 285.267334, 438.907410
1.170287, 0.101574, 411.389587, 253.862427, 421.131775
1.199878, 0.104460, 471.397888, 22.986389, 383.901825
1.100620, 0.093832, 493.521545, 244.719223, 403.142334
1.073275, 0.086129, 590.184021, 129.650406, 391.948639
0.919120, 0.109568, 645.386230, 0.00000000, 348.035034
```



A Revolutionary Method

DATASCAPE derives its power from a hybrid of fuzzy logic, non-linear regression and numerical optimization. This novel method frequently outperforms other surrogate modeling techniques including neural networks.

History

DATASCAPE is based on a modeling approach invented by mathematicians and engineers to meet the demanding requirements for simulation and process control in the aerospace industry.



Courtesy of USAF

Proven Performance

Lockheed Martin has been reaping the benefits of using DATASCAPE to solve a wide range of challenging problems throughout the corporation, saving time and money.

In a single application, this technology has already saved the US Air Force over \$36 million.



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