ENTHOUGHT
SCIENTIFIC COMPUTING SOLUTIONS

Enthought Tool Suite

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SciPy '06
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Enthought Tool Suite

TRAITS
Initialization, Validation, Observation, and Visualization of Python class attributes

KIVA
2D primitives supporting path based rendering, affine transforms, alpha blending and more.

ENABLE
Object based 2D drawing canvas

CHACO
Plotting toolkit for building complex, interactive 2D plots

MAYAVI
3D Visualization of Scientific Data based on VTK

ENVISAGE
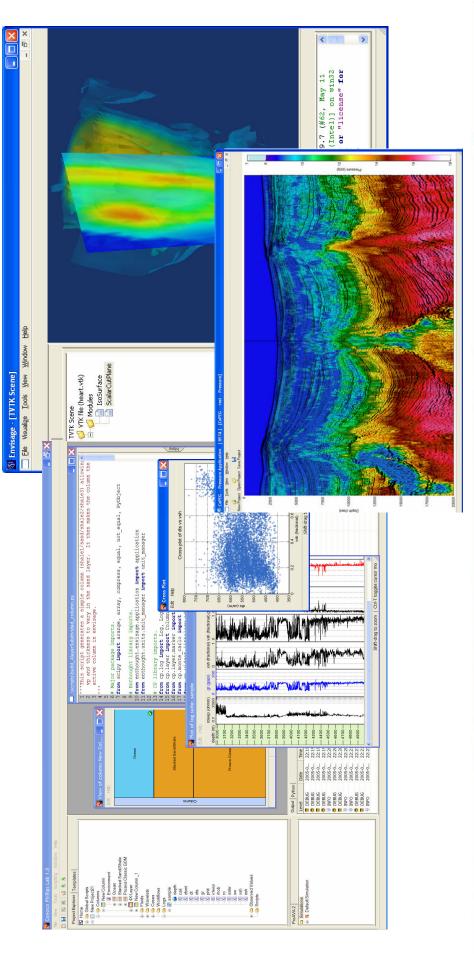Application plugin framework for building scriptable and extensible applications

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Envisage Applications

- 2D and 3D Visualization
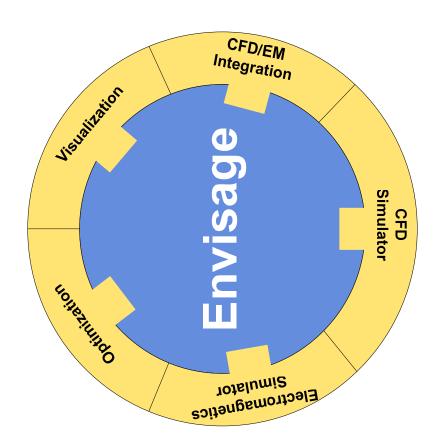- Workflow Construction
- Scriptable
- Extensible

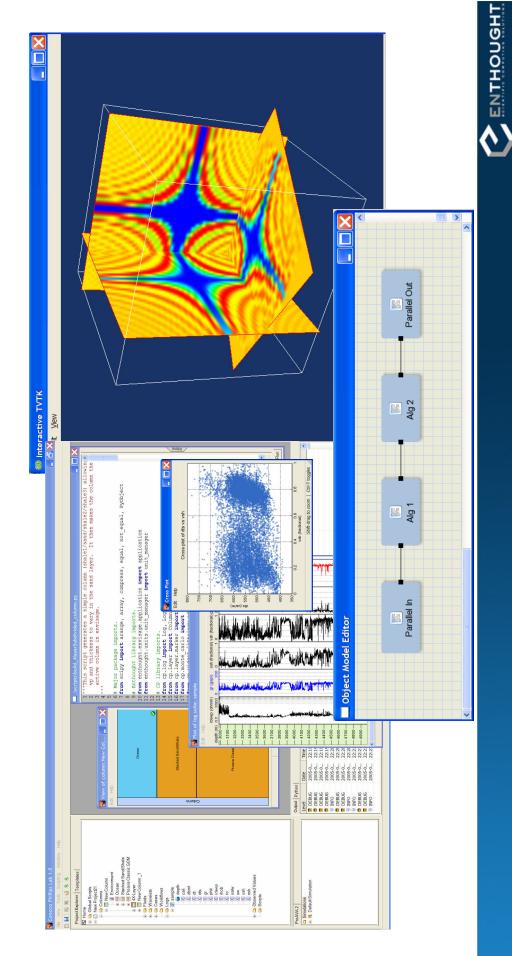# Envisage: An Integrated Science Environment

Multiple Plug-ins. One Application.

Envisage Application

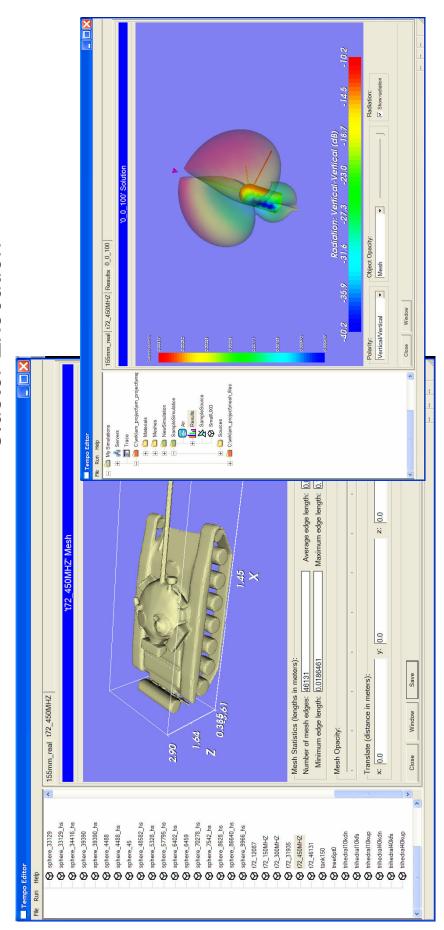- 2D and 3D Visualization
- Workflow Construction
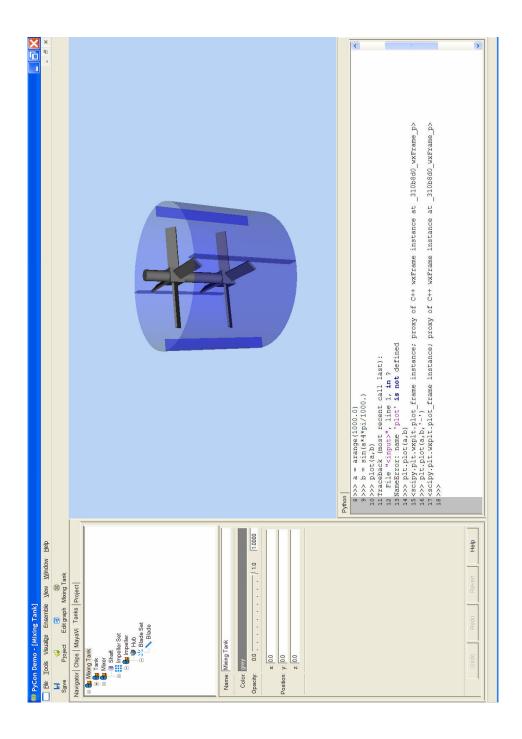
- Scriptable
- Extensible

Army Research Labs (ARL)

- Electromagnetics Simulation
- Python/C/Fortan90

- Fine grained Parallelism (MPI based)
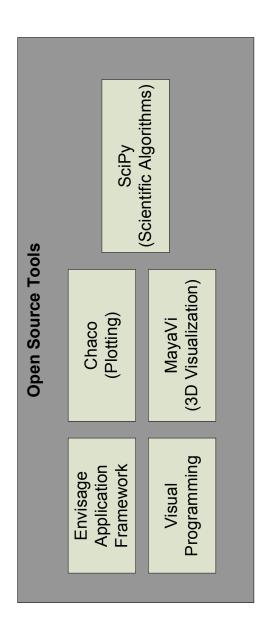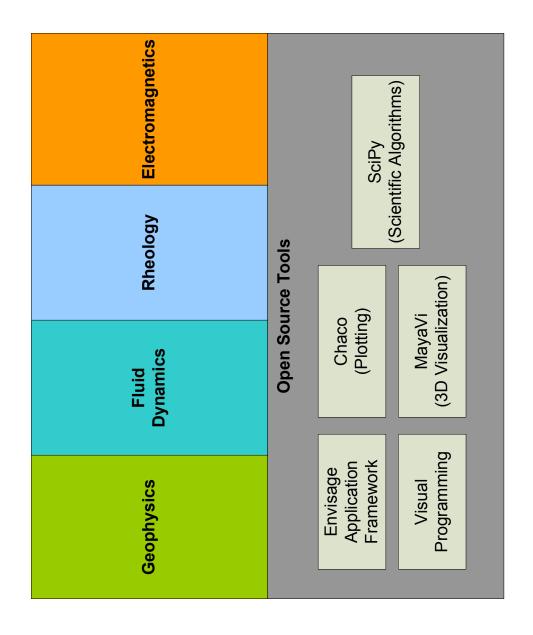- Desktop Application
- Cluster Execution

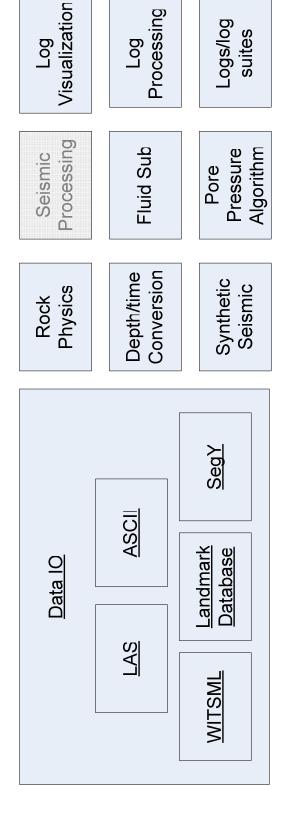# Fluid Dynamics

Open Source Tools

Open Source Tools

Envisage
Application
Framework

Chaco
(Plotting)

SciPy
(Scientific Algorithms)

Visual
Programming

MayaVi
(3D Visualization)

Commercial Application Areas

Geophysics	Fluid Dynamics	Rheology	Electromagnetics

Open Source Tools

Envisage Application Framework	Chaco (Plotting)	SciPy (Scientific Algorithms)
Visual Programming	MayaVi (3D Visualization)	

Geophysics Modules

Log Visualization	Seismic Processing	Rock Physics
Log Processing	Fluid Sub	Depth/time Conversion
Logs/log suites	Pore Pressure Algorithm	Synthetic Seismic

Data IO

- LAS
- ASCII
- WITSML
- Landmark Database
- SegY

Geophysics Applications

Pore Pressure

AVA Analysis

Rock Physics Analysis

Log Visualization

Log Processing

Logs/log suites

Seismic Processing

Fluid Sub

Pore Pressure Algorithm

Rock Physics

Depth/time Conversion

Synthetic Seismic

Data IO

LAS

ASCII

WITSML

Landmark Database

SegY
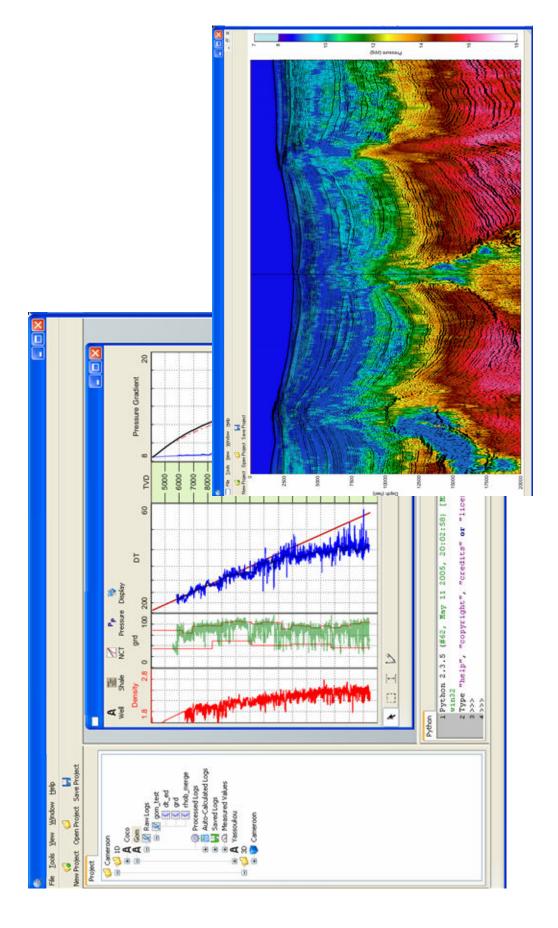
Log Processing Through Workflows

Pore Pressure

Stochastic AVA Analysis