Explore your VMAP data with ParaView

Louis Gombert - VMAP Users forum 24/02/26

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Kitware / Delivering Innovation, Advancing Knowledge

Software and AI R&D Services

Customers in government, industry, and academia
200+ active projects worldwide

Sustained Growth

100% employee-owned
Over $50M revenue

230 Employees Worldwide

Europe, France - Lyon

Deep Expertise

Strong academic reputation
90% staff hold a graduate degree

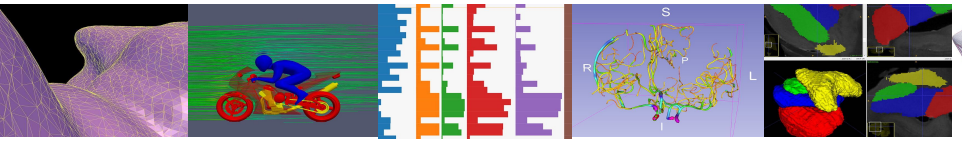
25+ Years of Experience

Kitware USA, 1998
Kitware Europe, 2010

Founded on Open Source

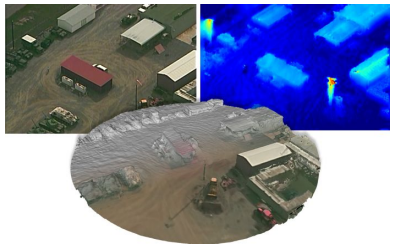
Vibrant, enduring platform/communities
Strong commitment to Open Science

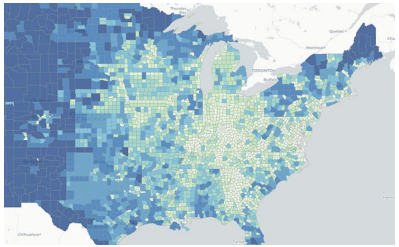
Kitware / Open Source Platforms - Open Science Focus

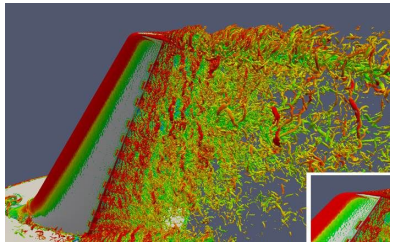


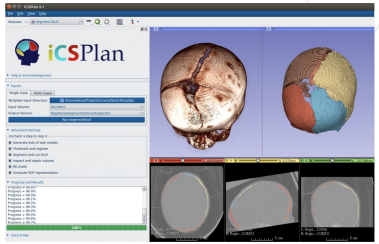

CMake
VTK
ParaView
Pulse Physiology Engine
KWIVER
scikit-build
CMB
xaitk
ITK
3D Slicer
VIAME
Girder
tomviz
ADIOS
trame
LidarView
TeleSculptor
MONAI

Areas of expertise / Built on open source









Computer Vision

Data and Analytics

Scientific Computing

Medical Computing

Software Solutions

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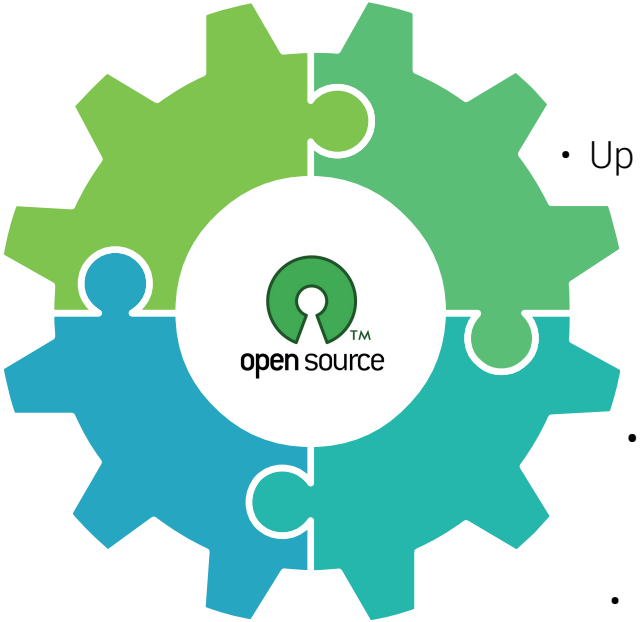
Open Source Benefits / Shifting Power

Source code ownership

- Source code ownership
- Integration with commercial software solutions

Cost effectiveness

- No license fee
- No vendor lock-in
- Shared maintenance costs



Flexibility and Agility

- Continuous development
- Up to date with new technologies
- Ability to customize and fix

Security

- Robust software and libraries
- Transparency
- Community effort
- Open Innovation mitigates risk

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Kitware / Services

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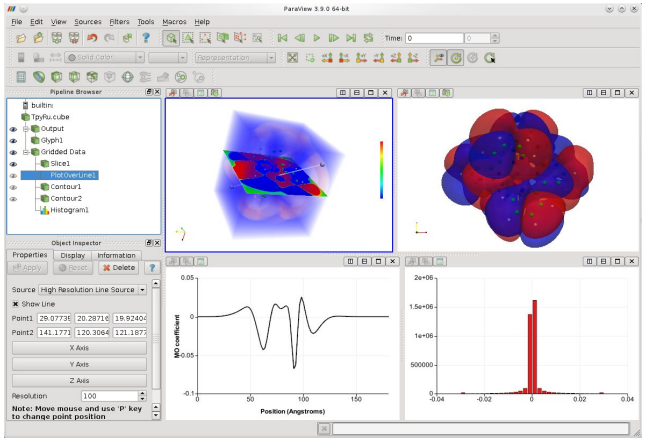
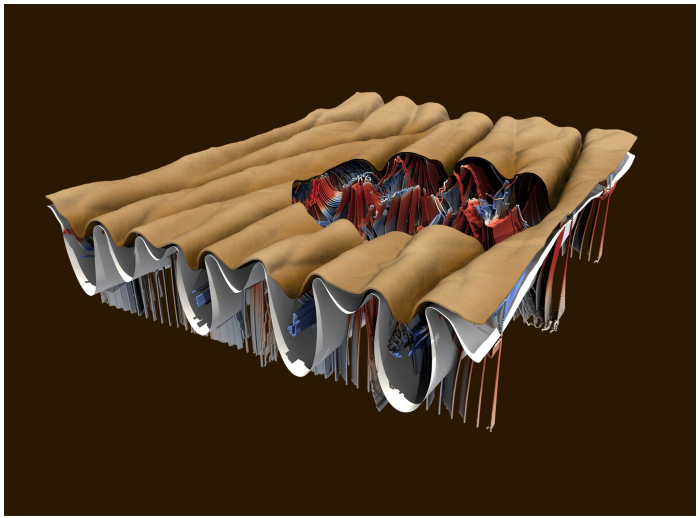
ParaView / High-Performance Post-Processing (2002)

- **Open-source, multi-platform, data analysis and visualization application**
- **Analysis of extremely large datasets using distributed memory computing resources**





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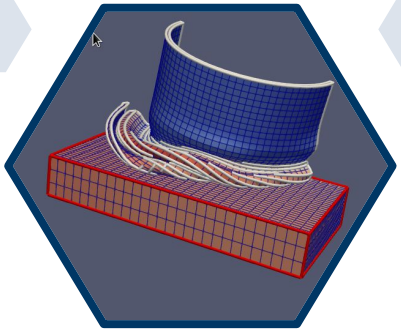
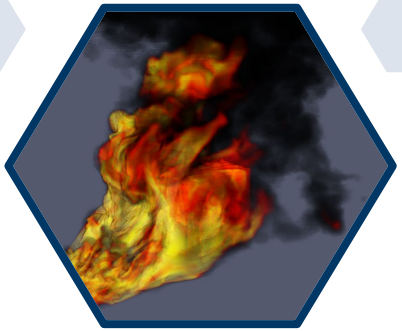
Features / Application Domains

Fluid Dynamic



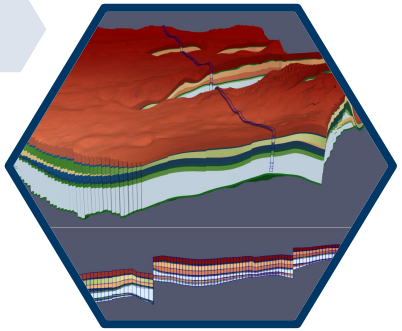
Structural Analysis

Medical



Particles

Astrophysic



Geoscience

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Physically Based Rendering

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ParaView Demo: Guided waves

- **Rescale** to data range over time
- **Warp** by scalar
- **Clip**
- **Select** points
- **Plot** selection over time
- **Export** to image

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ParaView Demo: Blow moulding

- **Warp** by vector
- 3D **Glyph**
- Export animation
- Save/Load state

In summary

Use ParaView to explore your VMAP datasets !

- Handle large datasets in 3D interactively
- Script with Python
- Generate 3D renderings and plots
- **Free and Open source** software!

VMAP ParaView plugin is available in the software package

Thank you!

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