

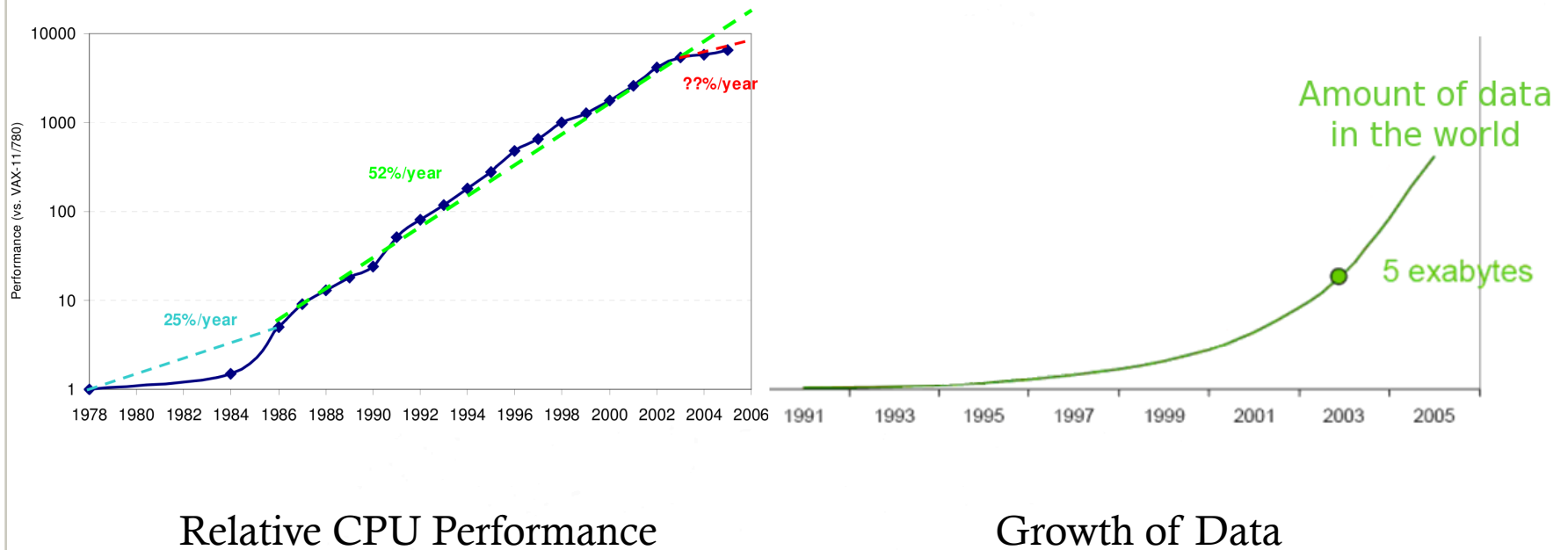
Size Matters

Revealing Small Scale Structures in Large Data

T. Fogal, J. Krüger

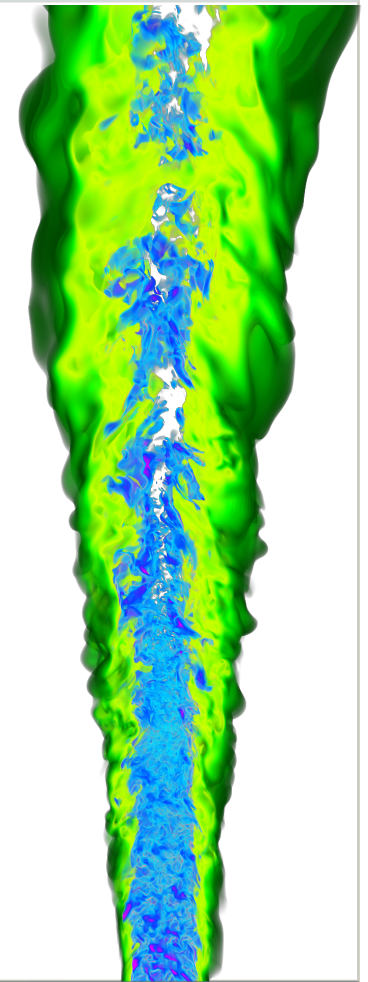
Large Data

- Data are growing faster than we can process them

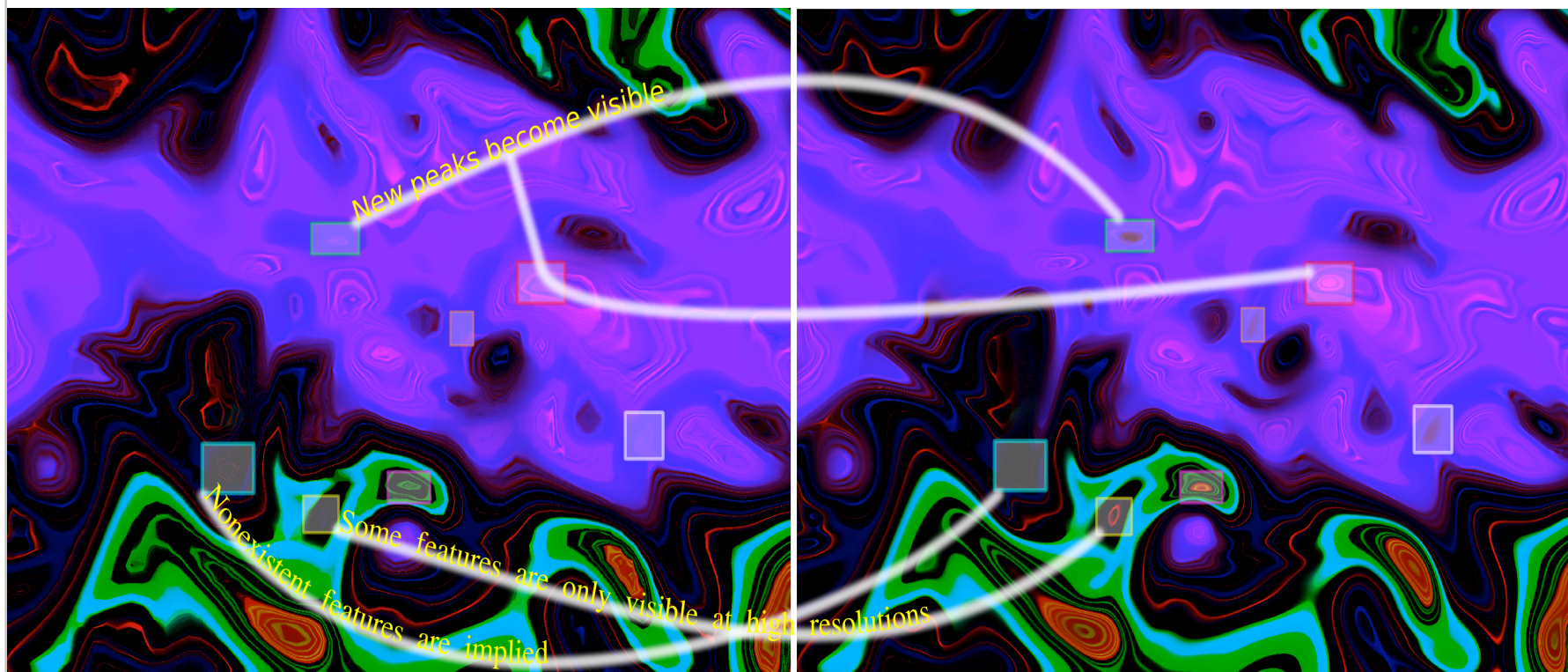


Visualizing High-Res Data

- Previous solutions have undesirable side effects
 - Downsample – loses high frequency features
 - Subset – Context information lost; global properties and features lost.
- Both approaches require additional processing time
- Obtaining high resolution data takes resources



The Need for High Resolution Visualization



Low resolution

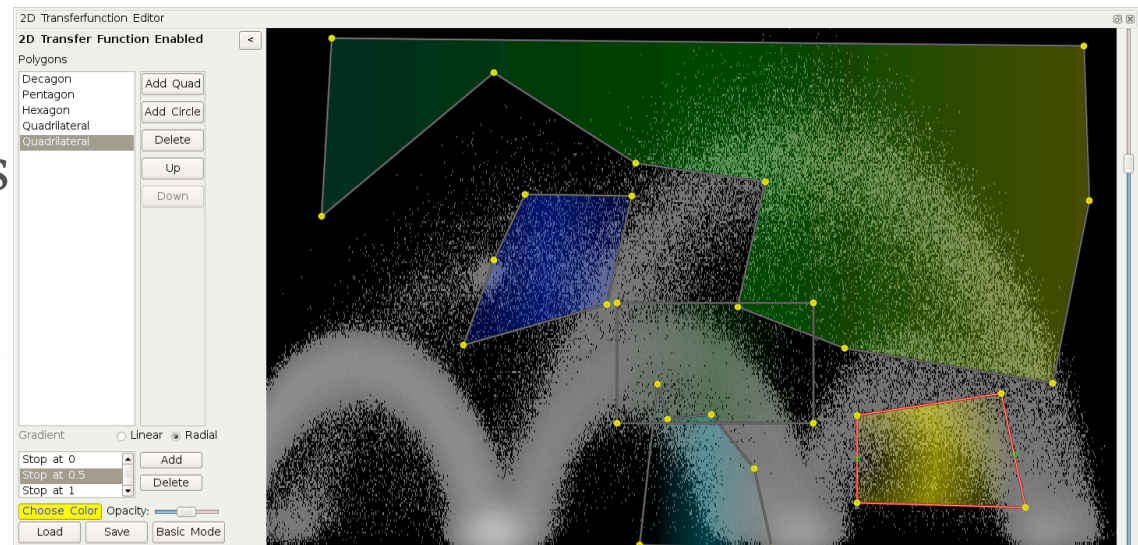
High Resolution

The Need for High Resolution Visualization (cont'd)



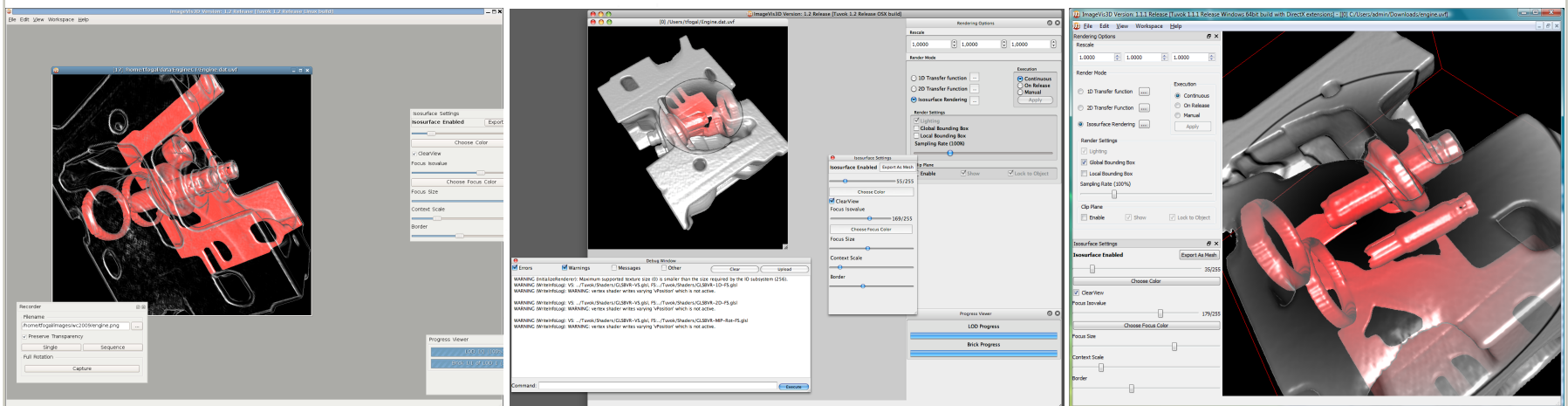
Visualization Interfaces

- Bottom line: visualization should help users identify new and interesting features of their data
- Slow (batch) interfaces: focus on known features
- Real time interaction enables exploratory visualization

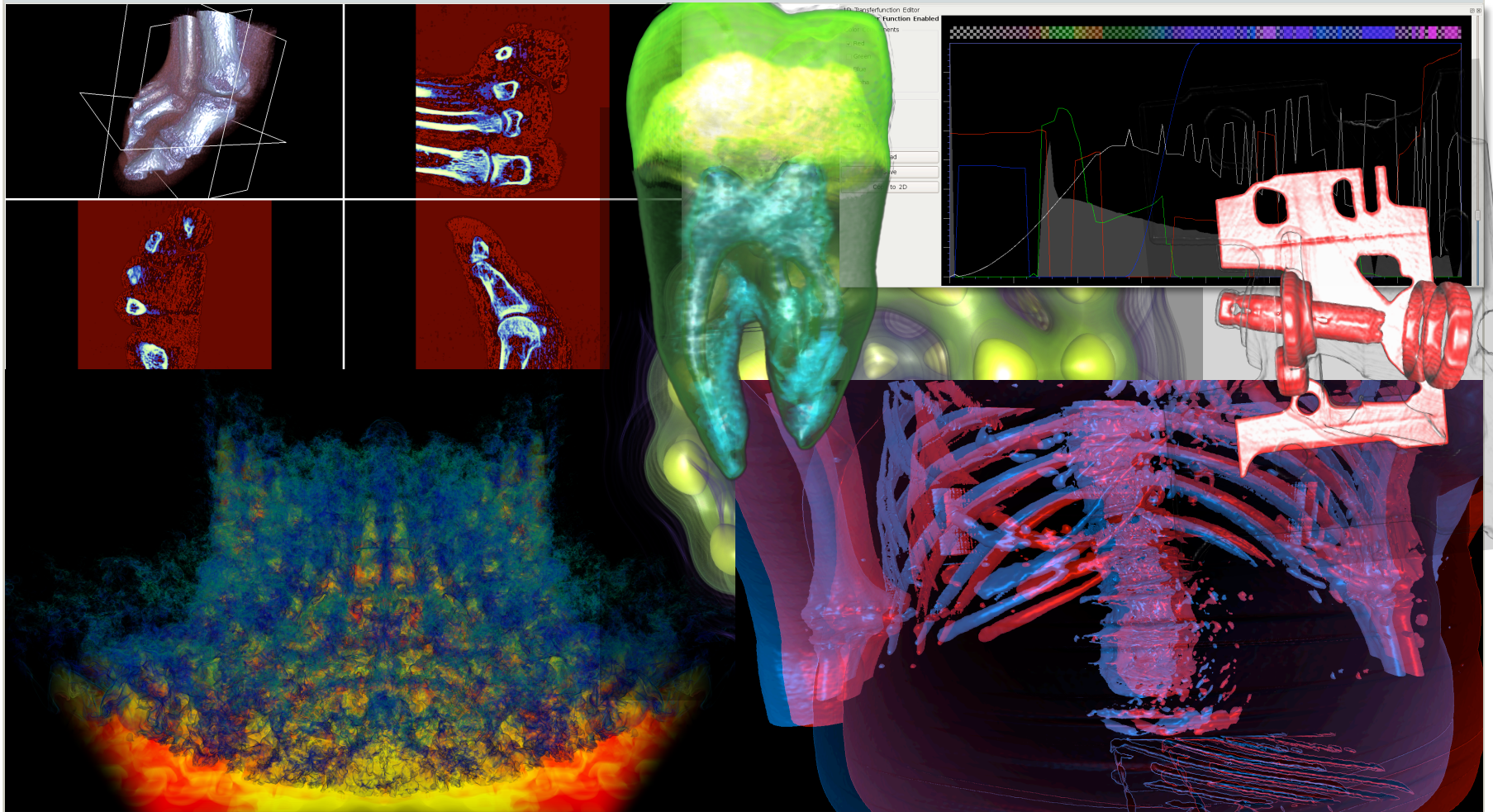


ImageVis3D

- Cross platform, multiresolution bricked volume rendering application
 - Always interactive
 - Workstation memory does not limit dataset size



ImageVis3D



ImageVis3D

QUESTIONS?