

MODIS Science Team Meeting

WebWinds



WebWinds: A Java-based Environment for the Interactive Display and Analysis of Scientific Data

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<http://webwinds.jpl.nasa.gov>

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Implementation features

- Cross platform capability: Windows (95/98/NT/2000), Mac, Unix/Linux
- Interactive data, image and color manipulation.
- The ability to act as a Web browser helper application, making it possible to survey scientific data archives in interactive mode.
- A scripting language which allows session configuration, re-run and real-time network collaboration, automatically.
- A context sensitive help system.
- Complete documentation including examples.

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Recent enhancements:

- **Most types of files may be stacked together (concatenated) to produce a larger file. This allows, for example, daily files to be combined to produce an animation.**
- **Most formats of HDF-EOS Swath data can be read and geo-located.**
- **Script files created for MASTER/MAS sample data.**

Key: **Bold-Developed here, available now**; *Italic- Developed elsewhere*;
Underlined- Available next release

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Recent enhancements, continued

- Visual subsetting from thumbnail images
- User selectable binning of non-regular data
- 3D Globe and Plane with height perspective
- Irregular bounding curves
- Animation

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Recent enhancements, continued

- *Separate, complete installation packages for PC, Mac, Sun, SGI and Linux systems. This enables 'one stop' shopping and simple installation.*
- *Shortcuts can be generated automatically with macros.*
- *A new Overlay tool allows tabular (ASCII) data to be superimposed on an Image. These overlays can show variations in symbol size, color and range and thus represent the numerical value of the tabular data.*

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WebWinds Applications Suite

Controls

Animator
Calculator
ColorTool
Combine Slider
RGB-Slider
Slider
3-Slider
3 Axis Rotator
2 Axis Rotator

Display/Controls

Combine
Compare
Contour
Decimate/Subset
FFT
Histogram
Image
LinePlot

Utilities

Remote Sessions
Macros
Rerun
Pause

Snapshot

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Displays

Average
Profile
TrackPixel
ValueView
Window Tool
2D Scatterplot
Plane
Globe
XYPlot

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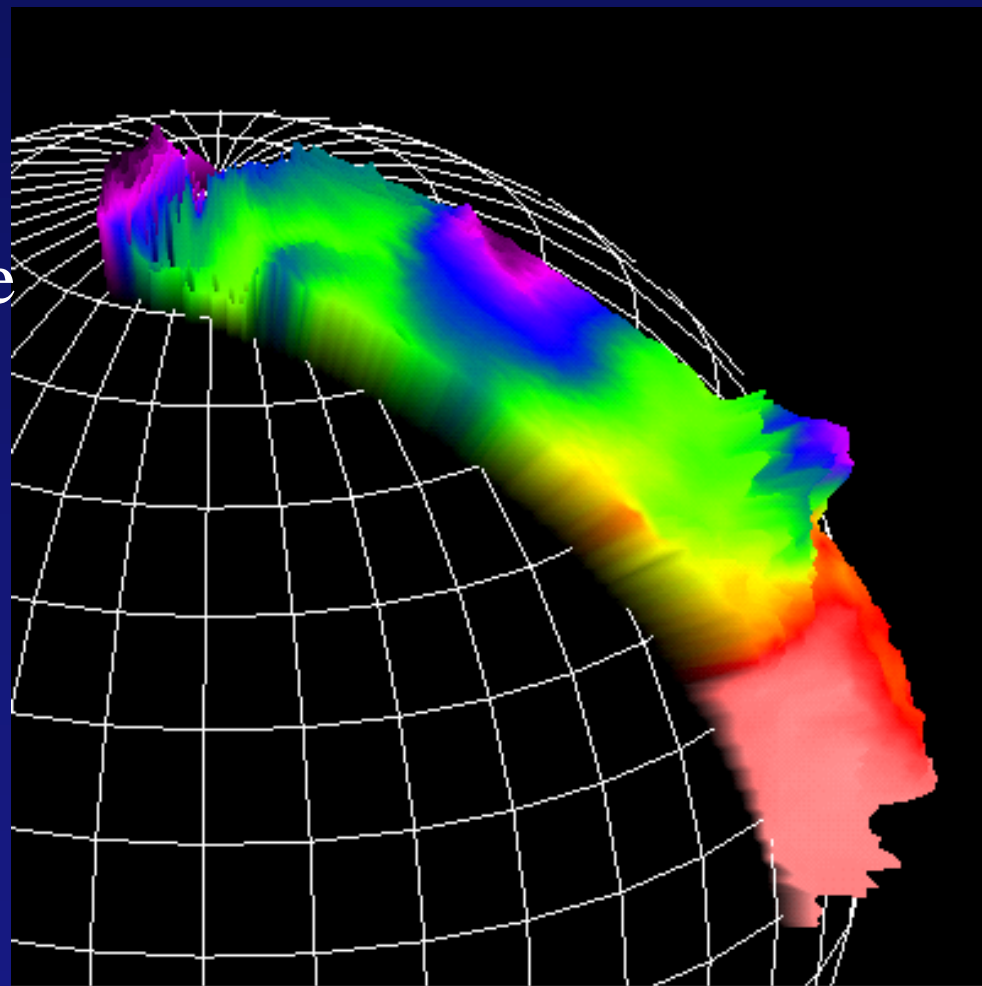
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High Performance 3D
Graphics Using OpenGL-
AIRS Surface Temperature
Swath Over Elevation
Data

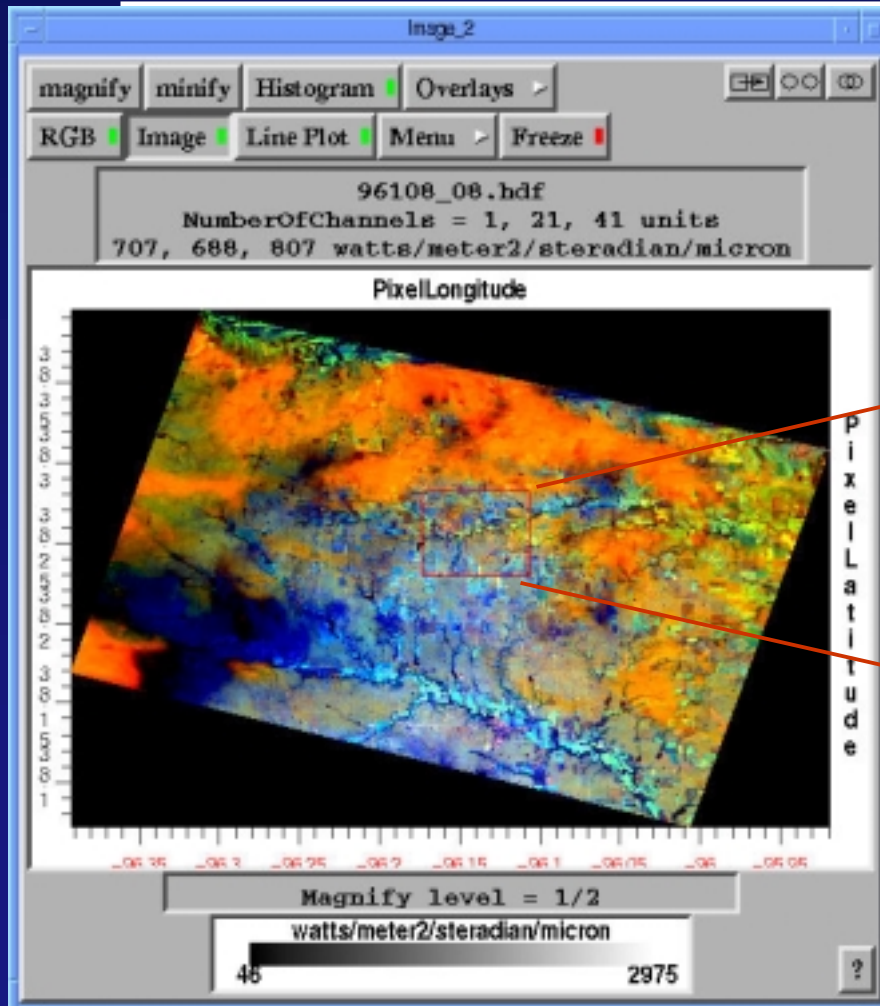


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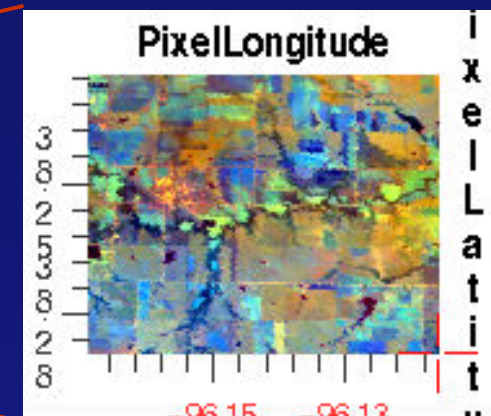
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Visual subsetting of MAS data



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Status/Concerns

- Next release nearly complete-looking for beta testers
- We want to create scripts that facilitate reading MODIS files
- Some MODIS L1B files (MOD021...) have incorrect meta data descriptors preventing us from geo-referencing data.
- We plan to have a server package that can do subsetting by the end of summer