The CoastWatch Data Analysis Tool: Status and Future

Peter Hollemans, Ø Terrenus Earth Sciences Consultant for NOAA/NESDIS

CoastWatch Operations Managers Meeting, August, 2008

Talk Outline

- About CDAT

- Current Release

- Future Releases

Example Screen
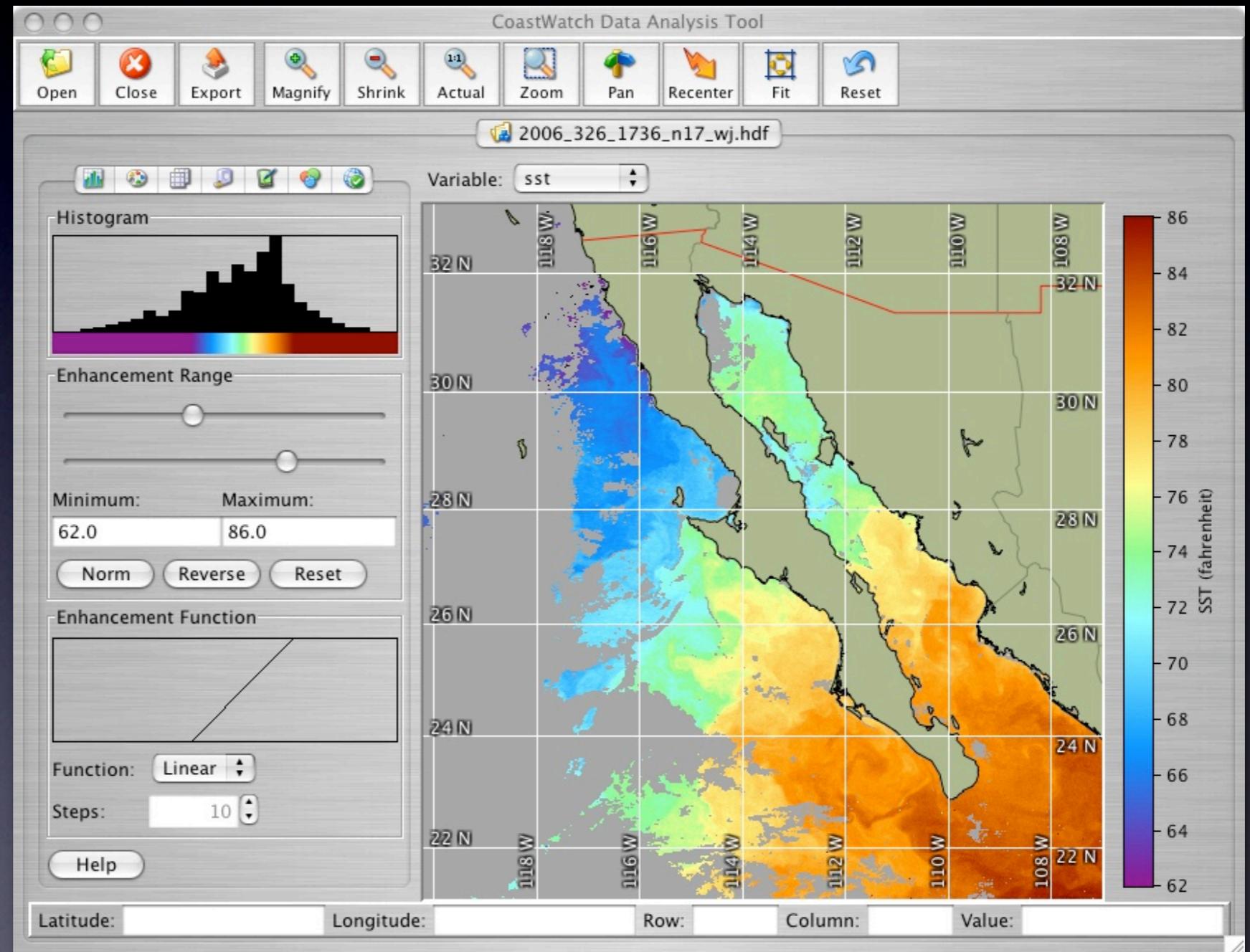
About CDAT

Current Release

Future Releases

History

About CDAT

Current Release

Future Releases

2001	Beta release in C
2004	Java release with CW utilities
2005	OPeNDAP network support
2006	GUI updates, units conversions, expression masking
2007	Navigation analysis, user's guide, full screen mode, ACSPO, non-AVHRR NOAA 1b

User Groups

- NOAA/NESDIS researchers: verify products, analysis

- Academic researchers: data conversion, analysis, visualization

- Casual and commercial users: fishing, weather

Home Page

About
CDAT

Current
Release

Future
Releases

- coastwatch.noaa.gov/ cw_cwfv3.html

- Installation packages, documentation

- Errata, prereleases

Development

- New versions released every 6-12 months

- Major feature requests from NESDIS (approval and funding)

- Minor feature requests from users

- Bug fixes are ongoing
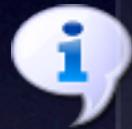
Documentation

- Data users: User's guide, help menus

- Software developers: Java code API in HTML (Javadoc), user's guide chapter on main modules

- Data providers: User's guide appendices on supported formats & metadata
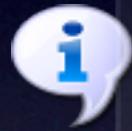
New Features (3.2.2)

About
CDAT

Current
Release

Future
Releases

- Windows Vista support
- Full screen mode
- NOAA 1b improvements
- Navigation analysis
- User's guide updates

New Features (cont ...)
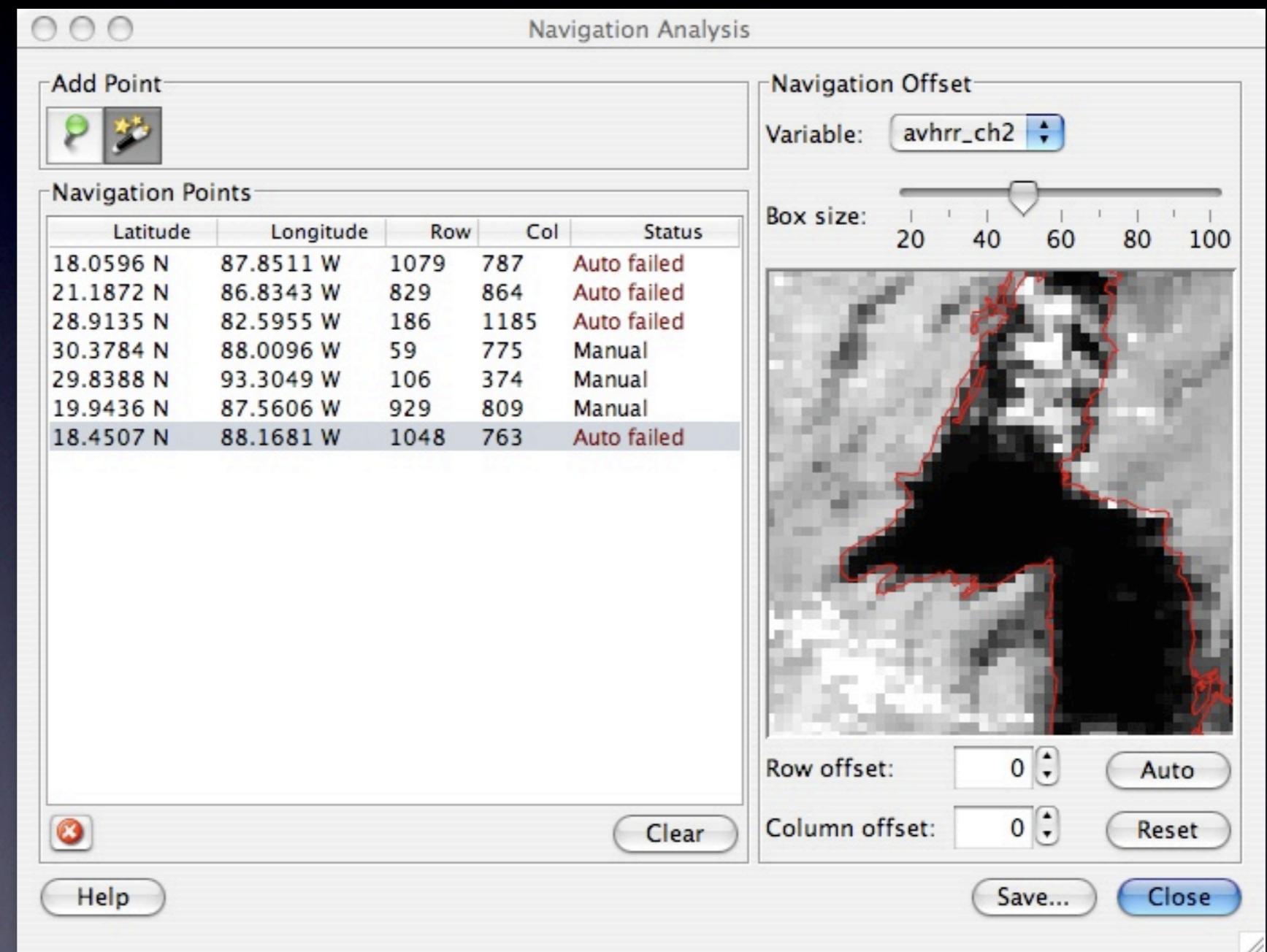
About
CDAT

Current
Release

Future
Releases

User Installations

- Total of 3571 user installations since April 2006 (~130 per month)

- Many more users installing than actively using:

Active 5%

Inactive 95%
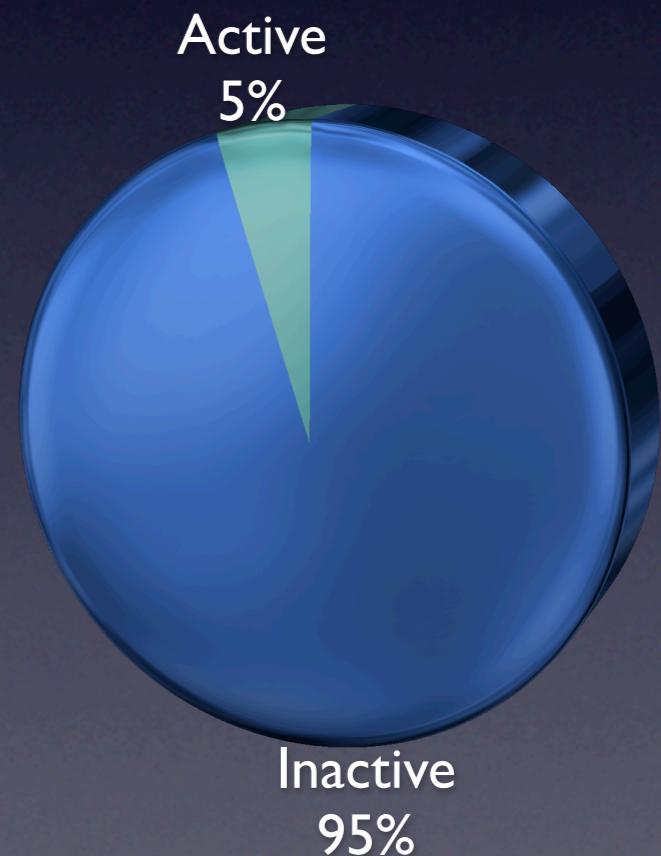
User Distributions

Geographic Location

About CDAT

Current Release
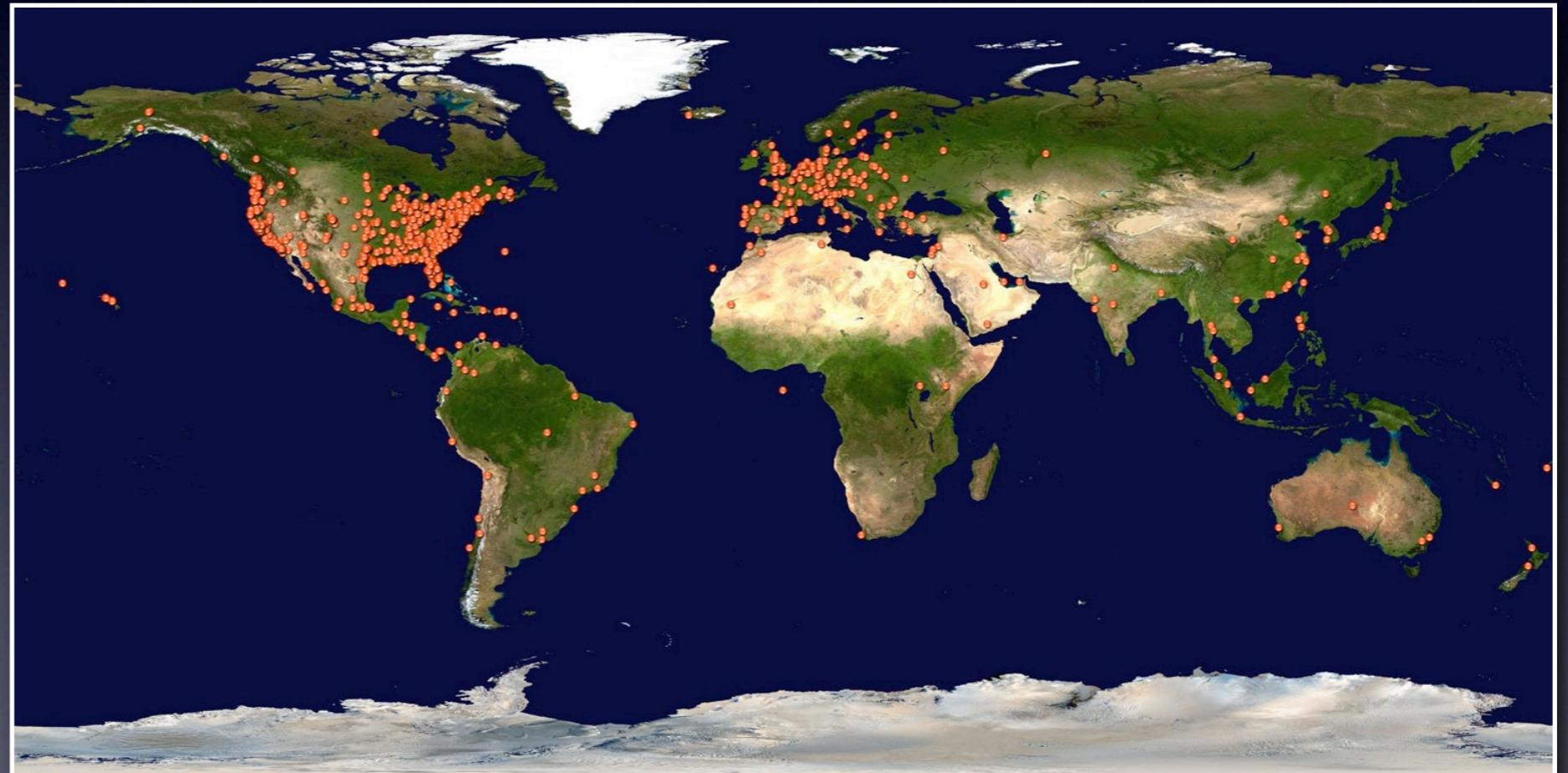
Future Releases

User Distributions

About CDAT

Current Release

Future Releases

Network Domain

.gov 12%

.edu 12%

Other 76%

Operating System

Mac 8%

Unix 6%

Windows 86%
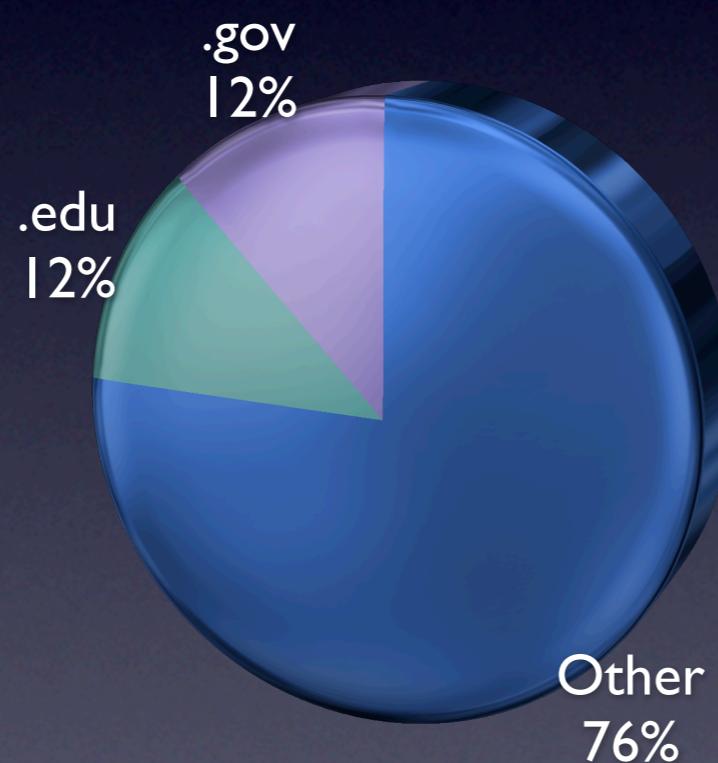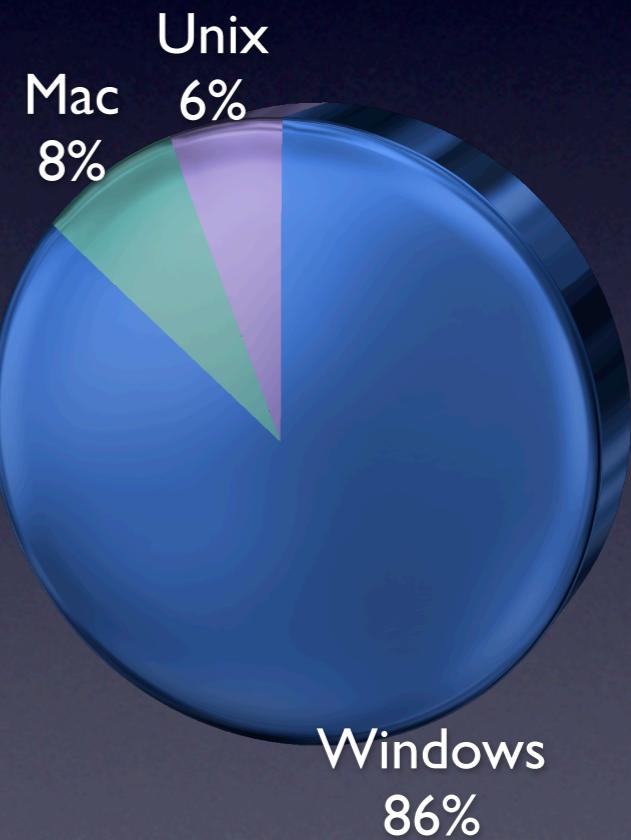
Current Development (3.2.3)

- Point data overlay

- XML-based shapefile display

- Data time series support

- Support for 3D and 4D CF-compliant netCDF and OPeNDAP data

Feature Ideas

About CDAT

Current Release

Future Releases

- Vector data display

- Google Earth compatible output

- Flexible data import

- Scriptable operations

Summary

- About CDAT: history, users, web site, development, docs

- Current Release: new features, current user stats

- Future Releases: development for 3.2.3, feature ideas

Acknowledgements

- CoastWatch node and central operations staff

- CoastWatch data users