McIDAS-X and McIDAS-V Information

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Program Manager

Overview

- Welcome New MUG Members
- McIDAS Supported Software Configurations
- 2008 MUG Fees
- Transition to McIDAS-V

Welcome New Users

- VisionTech Inc. – Ibaraki, Japan
- University of Tokyo – Tokyo, Japan
- Tokyo Broadcasting System – Tokyo, Japan
- National Water Commission of Mexico – Mexico City, Mexico
- Environmental Systems and Services – Richmond, Australia
- Hong Kong Observatory – Kowloon, Hong Kong

Welcome New Users

- India Meteorological Department – New Delhi, India
- Chinese Air Force – via Comtrol Corp., Taiwan
- Central Weather Bureau – Taipei, Taiwan

Supported Configurations

Vendor	Operating System	Compilers Supported	Compilers Verified
Apple - Mac PPC	OS X v10.4	g77: 3.4.3 - Fink gcc: 4.0	
Apple - Mac Intel	OS X v10.4	g77: 3.4 - SourceForge gcc: 4.0	
HP	HP-UX 11.11	HP F90 3.1 HP C/ANSI C 11.11.16	

McIDAS-X

Supported Configurations

Vendor	Operating System	Compilers Supported	Compilers Verified
IBM	AIX 5L 5.3.3	XLF 8.1.0 XLC 6.0	g77: 3.4.4 gcc: 3.4.4
Microsoft	Windows XP Pro SP2 with SFU 3.5	g77: 3.3 gcc: 3.3	
Red Hat	Linux 4 - Kernel 2.6.9 ELsmp	g77: 3.4.6 gcc: 3.4.6	

Supported Configurations

Vendor	Operating System	Compilers Supported	Compilers Verified
SGI	IRIX 6.5.21	F77 7.4.2 ANSI C 7.4.2	g77: 3.3.2 gcc: 3.3.2
SUN	Solaris 10 SPARC Platform	Sun Studio 11 Sun Studio 11	g77: 3.4.6 gcc: 3.4.6
SUN	Solaris 10 x86 Platform	g77: 3.4.6 gcc: 3.4.6	

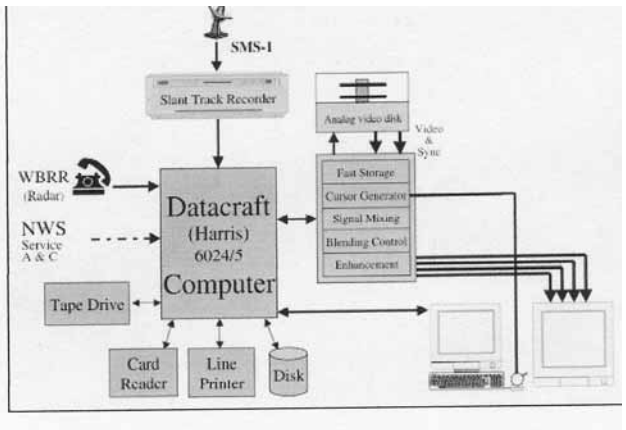
2008 MUG Fees

SX - one or two machines	$6,300
DX – three to five machines	$12,600
MX – six or more machines	$24,700
McIDAS-XCD includes updates to DVB-S	$7,940
SDI and SDI-104 (SSEC Data Ingestor), per satellite family	$7,940

NOTE: Currently, McIDAS-X support includes support for McIDAS-V

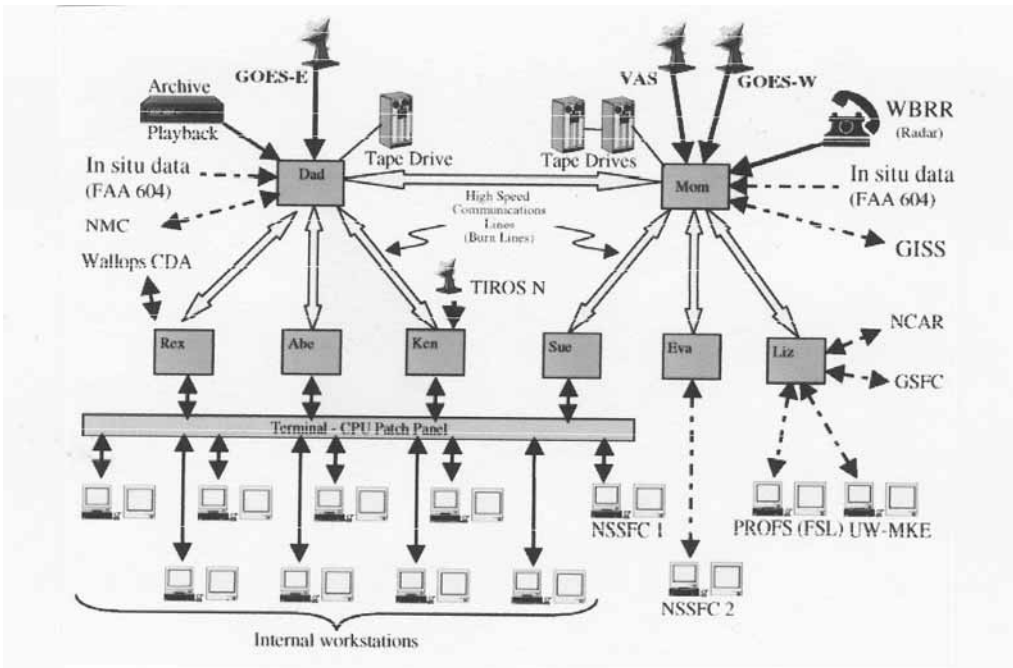
Transition to McIDAS-V

- McIDAS nearly 35 years of development
  - 1st generation 1973
    - Harris/5 computer



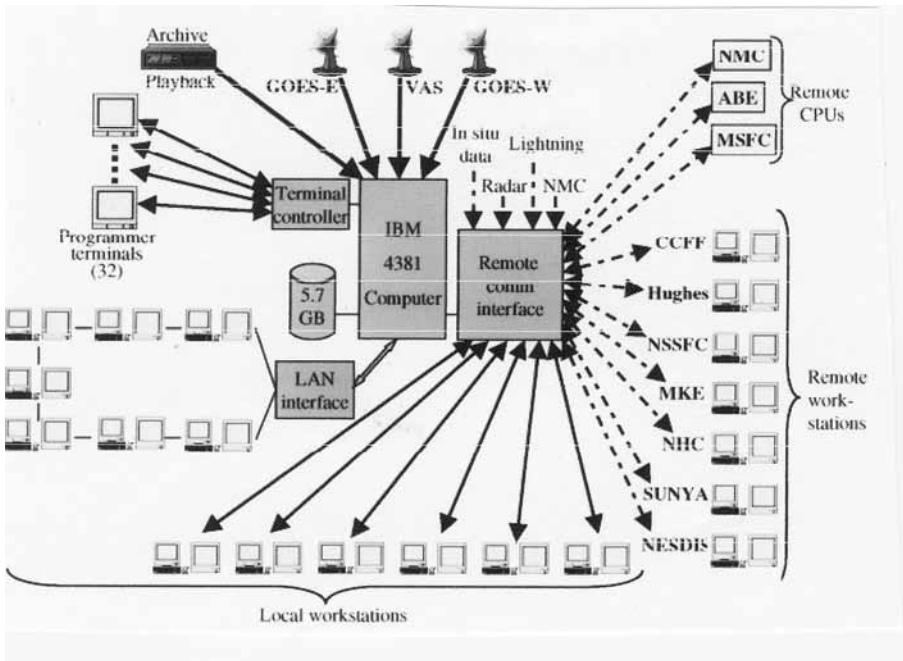
Transition to McIDAS-V

- McIDAS nearly 35 years of development
  - 2nd generation 1978
    - Harris/6 computers, distributed system



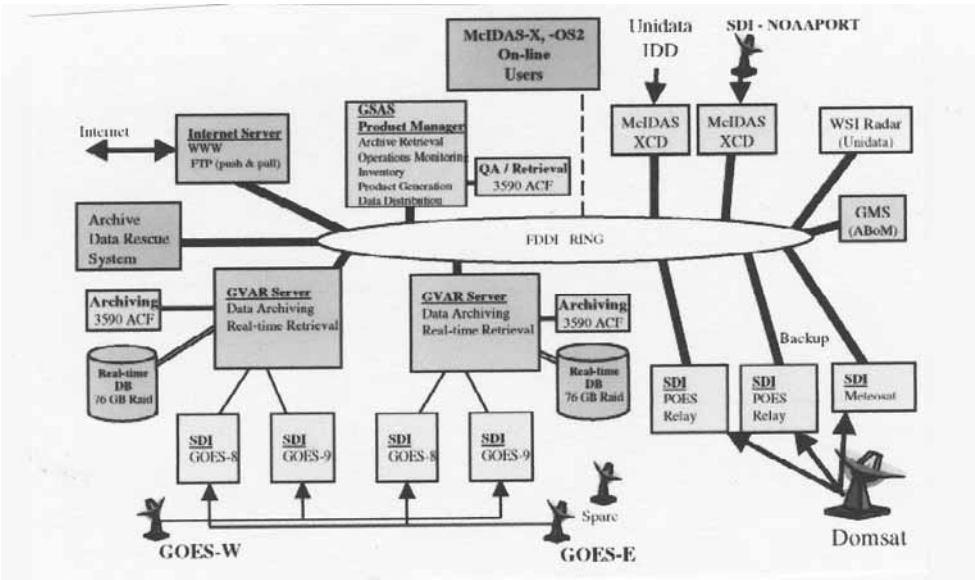
Transition to McIDAS-V

- McIDAS nearly 35 years of development
  - 3rd generation 1984
    - IBM mainframe 43xx, OS/2 workstation



Transition to McIDAS-V

- McIDAS nearly 35 years of development
  - 4th generation 1992
    - McIDAS-X , Unix environment



Transition to McIDAS-V

- McIDAS nearly 35 years of development
  - 1st generation 1973
    - Harris/5 computer
  - 2nd generation 1978
    - Harris/6 computers, distributed system
  - 3rd generation 1984
    - IBM mainframe 43xx, OS/2 workstation
  - 4th generation 1992
    - McIDAS-X , Unix environment
  - 5th generation 2007
    - McIDAS-V

About McIDAS-V

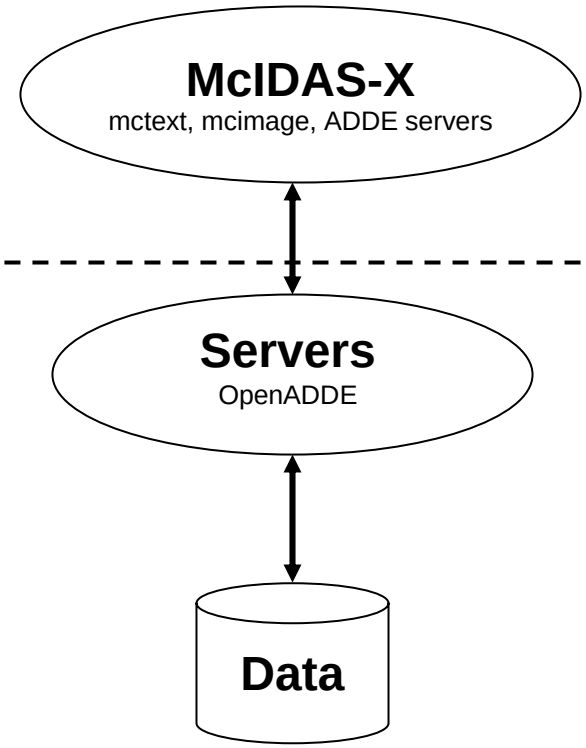
- McIDAS-V software built on SSEC's VisAD and Unidata's IDV libraries
- McIDAS-V 1.0alpha5 just the beginning
  - Emphasis on user interface
  - McIDAS-X bridge
- McIDAS-V open-source
- McIDAS-V user support available through McIDAS Users' Group

4 Goals for the MUG Meeting

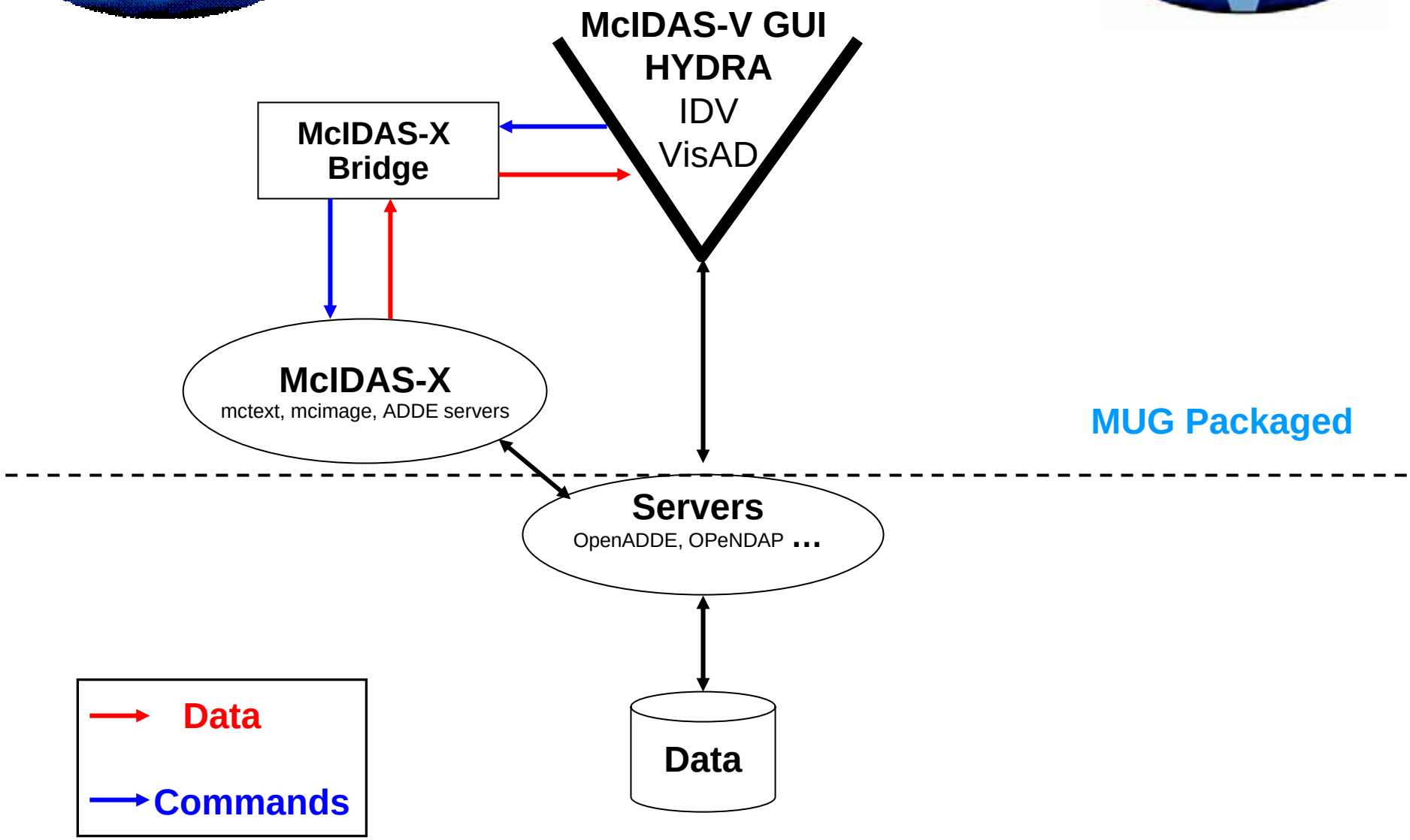
- ✔ Easy installation and configuration of McIDAS-V and the McIDAS-X listener
- ✔ New McIDAS-V GUI
- ✔ McIDAS-V must be able to "bridge" with current McIDAS-X
- Integrate HYDRA (HYperspectral-viewer for Development of Research Applications) into McIDAS-V

Next Area of Development

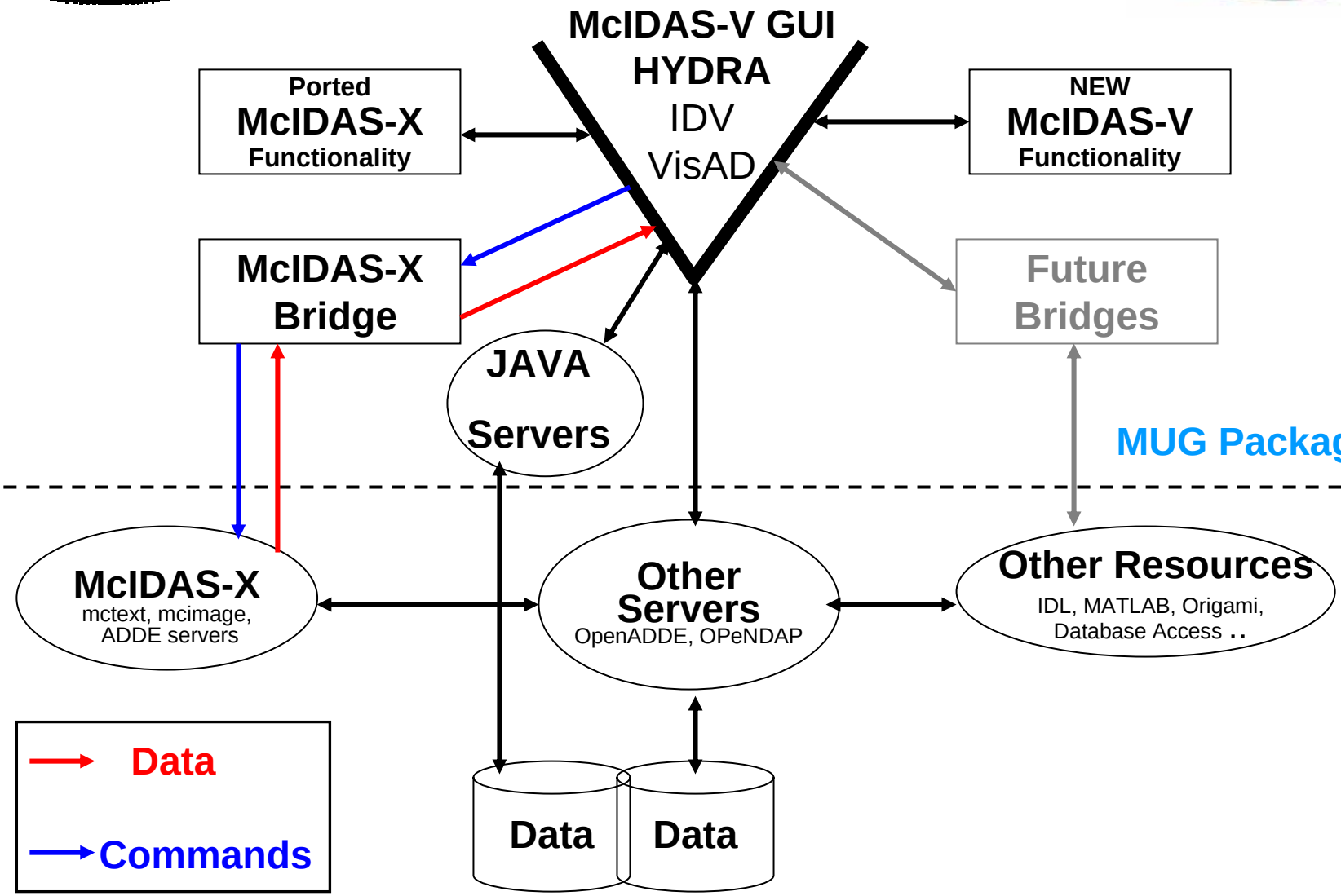
- McIDAS-V, without the bridge, must access and output other types of data already available in McIDAS-X
  - Display local and remote image datasets, including archived satellite imagery
  - Plot and contour local and remote McIDAS grid datasets
  - Contour remote datasets and contour and plot local McIDAS point datasets
  - Save the digital data file(s) generated in above


McIDAS-X
mctext, mcimage, ADDE servers
MUG Packaged
Servers
OpenADDE
Data

McIDAS-V 2008



McIDAS-V Future



McIDAS-V Development

Six Main Goals - #1

- Develop a powerful and versatile software system for environmental data processing, analysis and visualization
  - Platform independent
  - Interface to wide variety of distributed computing techniques
    - Client/server
    - Cluster computing …
  - Open-source

McIDAS-V Development

Six Main Goals - #2

- Support existing and evolving needs of scientific research and algorithm/applications development for new programs, such as NPOESS and GOES-R and for retrospective data, such as GOES and POES
  - Display hyperspectral data as images or spectra
  - Easily import new data types and formats
  - Create output images in commonly used formats

McIDAS-V Development

Six Main Goals - #3

- Enable an environment to support data fusion and algorithm interoperability from existing and future sources
  - User interfaces must allow any data to be fused in any compatible display frame of reference
  - Support a variety of scripting languages and environments
  - Build on the data coordinates already standardized in VisAD and IDV

McIDAS-V Development

Six Main Goals - #4

- Continue to fully support McIDAS Users' Group and McIDAS-X functionality as they transition to McIDAS-V
  - McIDAS-V will maintain a distributed environment and functionality
  - Must be able to output merged satellite data into a single data file
  - Users will be able to center data by lat/lon, image line/element and file line/element

Six Main Goals - #5

- Support operational users by providing frameworks in McIDAS-V, thus enabling a natural transition path for research results into operations
  - Unattended automated processing
  - Unattended automated display of products
  - Support legacy scripts through the bridge, providing time for users to convert scripts from McIDAS-X to McIDAS-V

Six Main Goals - #6

- McIDAS-V will be used to educate students in remote sensing and physical sciences, with students integrally involved in its development, evolution and use
  - Support educators and scientists in development of outreach tools
  - Develop remote sensing and physical science training modules
  - Involve students in testing, reviews of usability, suitability and documentation

Current

McIDAS-V Development Team

- Kevin Baggett
- Jon Beavers
- Gail Dengel
- Bruce Flynn
- Rick Kohrs
- Dave Parker
- Tom Rink
- Becky Schaffer
- Jessica Staude
- Tom Whittaker
  - advisor
- Bill Hibbard
  - advisor
- Don Murray
  - Unidata collaborator
- Jeff McWhirter
  - Unidata collaborator