

McIDAS Users' Group MUG Update

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2016 MUG Meeting – Madison WI – Nov 16-17



MUG Update

- MUG Personnel
- What's New in 2016
- Who uses McIDAS-X and McIDAS-V?
- McIDAS Support Requests
- How long will McIDAS-X be supported?



MUG Personnel – Current MUG Staff

Kevin Baggett: -XCD programming

Jon Beavers: -V programming

Bob Carp: Help Desk, testing & doc

Jay Heinzelman: Help Desk & testing

Dave Parker: Systems programming

Barry Roth: Help Desk & documentation

2 new students – Sammy VanDyke & Matt Lane



MUG Personnel – Programmers

McIDAS-X

Russ Dengel
Dan Forrest
Tommy Jasmin
Rick Kohrs
Scott Lindstrom
Dave Santek
Tom Yoksas (Unidata)

McIDAS-V and VisAD

Tommy Jasmin
Tom Rink
Yuan Ho (Unidata)



MUG Personnel – Unidata Collaboration

Working Together on VisAD, IDV, -V

- Combined -V / IDV Developers Meeting in Madison, November 2011
- Monthly Teleconferences
- Merged our developer tools (git, redmine)
- MUG testers helping to test new functionality coming from IDV



MUG Personnel – Training and Outreach

Demonstrations & Talks

- AGU Conference
San Francisco CA (2015)
- AMS Annual Meeting
New Orleans LA (2016)
- EUMETSAT Meteorological Satellite Conference
Toulouse (2015), Darmstadt (2016)
- NWA Annual Meeting
Norfolk VA (2015), Oklahoma City OK (2016)



What's New in 2016 – McIDAS–X Releases

2016.1 – February 2016

- Preliminary release of GOES-R ABI servers, calibration and navigation
- Added HimawariCast HRIT servers

2016.2 – October 2016

- Updates to the preliminary release of the GOES-R ABI servers for bug fixes, performance improvements, and support of Level 2 products

Next release – early 2017

- More GOES-R updates planned, including multi-band IMGCOPY and GLM servers



What's New in 2016 – OS Support for –X

-X Version	Vendor	Operating Systems	Compilers Supported
2016.1	Apple - Mac Intel	OS X 10.9.5 OS X 10.10.5	gfortran/gcc 4.9.2
2016.2	Apple - Mac Intel	OS X 10.10.5 OS X 10.11.5	gfortran/gcc 4.9.2 gfortran/gcc 5.3.0

beyond

We'll evaluate 10.12 when it's supported at the University of Wisconsin SSEC, and then support only 10.11 and 10.12.



What's New in 2016 – OS Support for -X

Vendor	Operating System	Compilers Supported
Microsoft	Windows 7 Enterprise with SUA	g77 3.3 gcc 3.3 (packaged with SUA)

We have no plans to support Windows 8. We'll evaluate Windows 10 and beyond when they're supported at the University of Wisconsin SSEC.



What's New in 2016 – OS Support for -X

Vendor	Operating System	Compilers Supported
Red Hat	Enterprise Linux WS	
	6.7 Intel	gfortran 4.4.7 gcc 4.4.7
	7.2 Intel	gfortran 4.8.5 gcc 4.8.5

- We will evaluate 8.0 when it's supported at the University of Wisconsin SSEC.
- **We no longer support Linux PPC.** ESPC funded the additional hardware for PPC support, and they no longer use that hardware.



What's New in 2016 – OS Support for -X

Vendor	Operating System	Compilers Supported
SUN	Solaris 10 OS SPARC	gfortran/gcc 4.9.2
	Solaris 10 OS x86	sunset support with 2015.2

- The Solaris operating system is now maintained by Oracle. SSEC tests on Sun Solaris 10, which was purchased before Oracle acquired Sun Microsystems.
- In order to use the hdf5 and netcdf4 libraries for the new INSAT-3D, GOES-R, and Kalpana servers, we switched to gcc and gfortran, and removed support for x86.



What's New in 2016 – OS Usage for -X

- A survey was conducted in September 2015 with **100%** McIDAS sites reporting. **Thank you!**
- Only one question -- *What operating system(s) are you using on your machines running McIDAS-X?*

Operating System	# of Sites	Version(s) In Use
Apple Mac OS X	4	10.4 - 10.10
Linux	34	4.x- 7.x RHEL (24), CentOS (11), Ubuntu (7), SUSE (3)
Microsoft Windows	4	Win7 and Win10
Sun/Oracle Solaris	2	10 OS SPARC



What's New in 2016 – 2017 MUG Fees Announced

2017 MUG Fees

McIDAS (increased 5% over 2016)

SX (1-2 workstations) \$ 9,840

DX (3-5 workstations) \$19,680

MX (6+ workstations) \$39,360

XCD (increased 5% over 2016) \$14,340

SDI (decreased from \$8,340 in 2016 to
better match actual support costs) \$ 5,100



What's New in 2016 – New MUG Members

- AccuWeather
 - State College, Pennsylvania
- Pat King (private contractor)
 - Toronto, Canada
- Masdar Institute of Science & Technology
 - Abu Dhabi, United Arab Emirates

The total number of MUG Sites has stayed at
~40 sites for ~20 years.



Who uses McIDAS-X?

38 Current MUG Members

NOAA (10)

AWC, CLASS,
ESPC, NCO, NHC,
NWS-JSC, PACIFIC,
and WESTERN,
STAR, SPC

NOAA CI (2)

CIMSS/SSEC, CIRA

EDUCATION (1)

Unidata

NASA (2)

Langley, MSFC

Other Gov't (3)

FAA, NTSB,
Patrick AFB

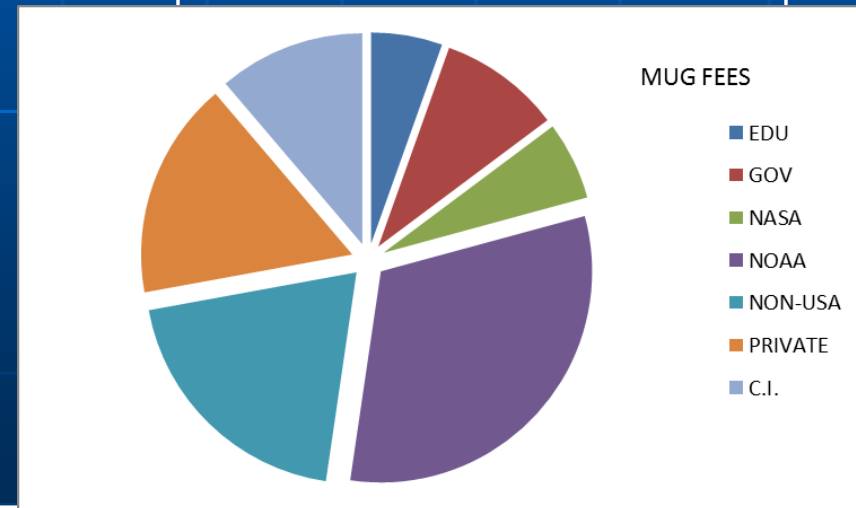
PRIVATE (9)

AccuWeather,
ATSC, Boeing,
Iteris, StormGeo,
TelventDTN,
Universal Weather,
the Weather

Company,
Weather
Decision
Technologies

Non-US (11)

AEMET, ABoM,
CONAE, EUMETSAT,
Green Power Labs,
HKO, Masdar, Mexico
NWC, Pat King,
Solargis, VTI



Who uses McIDAS-V?

McIDAS-V is now used in...

- numerous research projects
- CIMSS High School Summer Workshop
- the NOAA Environmental Visualization Lab
- Satellite Meteorology classes
(Miss State, Texas A&M, Wisconsin)
- EUMETSAT/CIMSS *International Summer School*
- visualizing data from the EUMETCast data stream
- at EUMETSAT and in EUMETSAT training courses



Who uses McIDAS-V?

from the usage statistics

	2014	2015	2016
Total Uses	370 K	600 K	880 K so far
.edu/.gov	20 K	20 K	20 K
All others	350 K	580 K	860 K

-V Forums
~1100 users

~3400
unique IPs

Mostly private and
non-US IP addresses

Windows7	66%	47%	20%
Linux	31%	51%	79%
Mac OS X	3%	2%	1%



McIDAS Support – User Support Requests

With so many new non-paying users, how do we prioritize our support?

1. McIDAS-X, -XCD and SDI questions from MUG members to the *McIDAS Help Desk*
2. McIDAS-V questions from MUG members to the *Help Desk and Support Forums*
3. McIDAS-V questions from non-MUG users to the *Support Forums*

ALL bug reports are put into the
McIDAS Inquiry System



McIDAS Support – User Support Requests

McIDAS-X, XCD, and SDI users receive their answers from the McIDAS Help Desk.

McIDAS-V users receive their answers from the Help Desk or from other forum users. Users of McIDAS-V are encouraged to answer the forum questions of other users and to share their knowledge and expertise.

2015 Inquiries & Forums	New	Resolved
McIDAS-X Inquiries	222	240
McIDAS-V Inquiries	331	255
McIDAS-V Forum Topics	112	112



How long will -X be supported?

- SSEC plans to support McIDAS-X through the current GOES-R Satellite Series, which is currently listed as 2036
 - ➔ NO END DATE IN SIGHT!!!
- No plans for support fee structure changes
 - MUG members will continue to receive priority support for -X and -V
- Continue to release -X as needed for bugs, updates, and new OS & data/satellite changes (~2 times per year)



How long will –X be supported?

- SSEC plans to support McIDAS–X through the current GOES-R Satellite Series, which is currently listed as 2036
 - ➔ NO END DATE IN SIGHT!!!
- Important Issues
 - ADDE written in Fortran and C → Python?
 - XCD becoming brittle → beta coming in 2017
 - Larger datasets mean larger images, grids, maps than currently allowed in McIDAS-X
 - The McIDAS-X GUI is written in tcl/tk and becomes more fragile with each OS upgrade



Looking for more user input!

1. Use the McIDAS-V Support Forums or contact the McIDAS Help Desk
2. Join the McIDAS Advisory Committee
3. Fill out the MUG Meeting Survey at the end of the meeting on Thursday
 - Do you have suggestions for improving the MUG Meeting?
 - What data types do you need to read/write with McIDAS?
 - On what platform(s) do you currently run McIDAS? Also, be sure to answer the new 2017 OS Survey.
4. If you have specific development needs, contact me about helping to fund development.



In Summary...

McIDAS Users' Group is still going strong!

- MUG Membership staying steady for -X, -XCD, and SDI → still our #1 Priority
- McIDAS-X will be fully supported through the GOES-R Program
- McIDAS-V usage and forum membership growing every day
- If -X works for you, then stay with -X. When new features or data types are added in -V, then do your new development in -V.



We need input from you to
make all of McIDAS better
for everyone!

THANK YOU!!!



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