

McIDAS Users' Group MUG Update

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2018 MUG Meeting – Madison WI – May 22-23



MUG Update

- MUG Personnel
- What's New in 2018
- 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 & -V doc

Jay Heinzelman: Help Desk & testing

Dave Parker: Systems programming

Barry Roth: Help Desk & documentation



MUG Personnel – Programmers

McIDAS-X

SSEC:

Russ Dengel
Rick Kohrs
Scott Lindstrom
Dave Santek

Unidata:

Tom Yoksas

McIDAS-V and VisAD

SSEC:

Tommy Jasmin
Tom Rink

Unidata:

Julien Chastang
Yuan Ho

Wisconsin:

Curtis Rueden



MUG Personnel – Unidata Collaboration

Working Together on VisAD, IDV, -V

- 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 (2016, 2017)
- AMS Annual Meeting
Seattle WA (2017) Austin TX (2018)
- EUMETSAT Meteorological Satellite Conference
Rome, Italy (2017)
- JPSS Science Week – College Park MD (2017)
- NOAA Environmental Data Management Workshop
Silver Spring MD (2018)
- NOAA Satellite Conference - New York NY (2017)
- NWA Annual Meeting - Garden Grove CA (2017)



What's New in 2017 – McIDAS-X Releases

2017.1 – February 2017

- Updates of ABI servers, calibration & navigation
- Preliminary GLM access using netCDF point servers
- Added support for Himawari-9

2017.2 – October 2017

GOES-16 Updates:

- larger frames for 21696 x 21696 0.64 μ m band 2 VIS
- larger number of frames from 999 to 9,999
- enhanced color shading for greater bit depth
- preliminary GLM servers & commands



What's New in 2018 – McIDAS-X Releases

2017.2u1 – May 2018

- for satellite sub-point change (now set for July 11, 2018)

2018.1 – May 2018

- RGBDISP displays RGB images in McIDAS image frames
- GLMDISP displays lightning data from GOES-16 GLM
- GLMLIST lists lightning data from GOES-16 GLM
- GLMIMG creates a density image from GOES-16 GLM
- Added future support for GOES-17,18,19
- Updated WWDISP to plot flood watches & warnings, severe storm & tornado warnings as polygons
- WXTLIST search is now case-insensitive
NO MORE ALL CAPS!!!



What's New in 2018 – OS Support for –X

Vendor		Operating Systems	Compilers Supported
Apple –Mac Intel		OS X 10.11.5	gfortran/gcc 5.3.0
		macOS 10.12.6	gfortran/gcc 7.1
beyond	We'll evaluate 10.13 when it's supported at the University of Wisconsin SSEC, and then support only 10.12 and 10.13.		



What's New in 2018 – 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 2018 – 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.



What's New in 2018 – OS Support for -X

Vendor	Operating System	Compilers Supported
SUN	Solaris 10 OS SPARC	sunset support with 2016.2
	Solaris 10 OS x86	sunset support with 2015.2

- **2016.2 – In February 2017, our Solaris machine failed. We continue to support current users, but will no longer support Solaris SPARC for new users.**
- 2015.2 - 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 2018 – OS Usage for -X

- A survey was conducted in September 2015 and again in October 2017 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 macOS	4	10.10 and higher (up from 10.4)
Linux	33	4.x – 7.x RHEL (20), CentOS (17), Ubuntu (6) (none on SUSE)
Microsoft Windows	3	Win7 and Win10
Sun/Oracle Solaris	2	10 and 11.3 OS SPARC



What's New in 2018 – 2019 MUG Fees Announced

2019 MUG Fees

McIDAS (increased 5% over 2018)

SX (1-2 workstations)	\$10,860
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DX (3-5 workstations)	\$21,720
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MX (6+ workstations)	\$43,440
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XCD (increased 5% over 2018)	\$15,780
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SDI (decreased from \$8,340 in 2016 to better match actual support costs)	\$ 5,100
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What's New in 2018 – New MUG Members

- NASA Columbia Scientific Balloon Facility
 - Palestine TX
- ENSCO
 - Cocoa Beach FL
- NOAA National Severe Storms Laboratory
 - Norman OK



Who uses McIDAS-X?

33 Current MUG Members

NOAA (10)

AWC, CLASS,
ESPC, NCO, NHC,
NSSL, NWS-JSC,
NWS-PACIFIC
REGION, SPC,
STAR

NOAA CI (2)

CIMSS/SSEC, CIRA

NASA (3)

CSBF, Langley,
MSFC

Other Gov't (2)

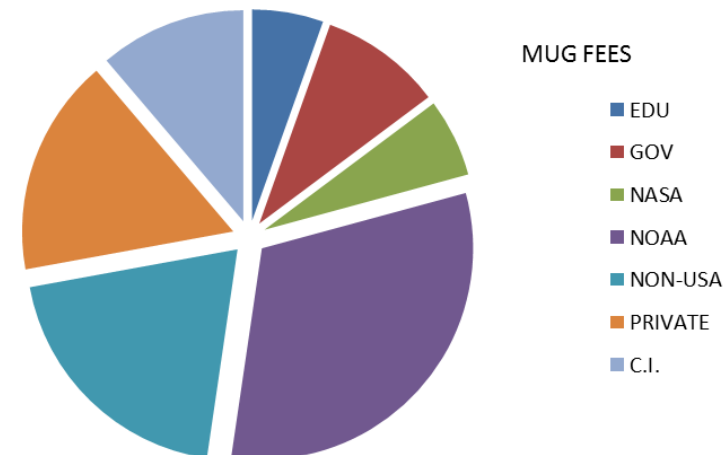
NTSB,
Patrick AFB

PRIVATE (9)

AccuWeather, AST,
Boeing, ClearAg,
DTN, ENSCO,
StormGeo,
the Weather Co,
Weather
Decision
Technologies

Non-USA (6)

AEMET, ABoM,
EUMETSAT,
Green Power Labs,
HKO, Mexico SMN
EDUCATION (1)
Unidata



Who uses McIDAS-V?

McIDAS-V is now used in...

- research projects & publications
- satellite blogs
- satellite meteorology classes
- visualization of EUMETCast and GEONETCast
- international training courses: EUMETSAT, CIRA
- private industry: recent inq from Aerolineas Argentinas



Who uses McIDAS-V?

from the usage statistics

	2014	2015	2016	2017
Total Uses*	370 K	600 K	1.31 M	2.52 million!!
.edu/.gov	20 K	20 K	22 K	14 K
All others	350 K	580 K	1.29 M	2.51 M

***each time a script is run or McIDAS-V is started**

-V Forums have ~1100 users

Usage Statistics show
~4200 unique IPs in 2017



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

X/XCD/SDI users receive answers from the Help Desk

McIDAS-V users receive 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	2016	2017
McIDAS-X	total	222	248	247
Inquiries	non-SSEC	145	141	166
McIDAS-V	total	331	236	146
Inquiries	non-SSEC	46	46	30
McIDAS-V Forum Topics		112	124	89



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, improvements, 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 2018
 - Larger datasets mean larger images, maps, and grids 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?
 - Do you use the McIDAS-X GUI?
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, updated & maintained through the GOES-R Series
- McIDAS-V usage 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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