

McIDAS Users' Group MUG Update

Becky Schaffer
Program Manager
McIDAS User Services



2019 MUG Meeting – Madison, Wisconsin



MUG Update

- MUG Personnel
- What's New in 2019
- 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 & programming

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
William Straka

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

- EUMETSAT Meteorological Satellite Conference
Tallinn, Estonia (2018)
- STAR JPSS Science Week – College Park MD (2018)
- AGU Conference – Washington DC (2018)
- AMS Annual Meeting – Phoenix AZ (2019)



What's New in 2019 – New McIDAS Website

SSEC

McIDAS
Man computer Interactive Data Access System

[HOME](#) [ABOUT](#) [MCIDAS-X](#) [MCIDAS-V](#) [MCIDAS-XCD](#) [INGESTORS](#) [LICENSING](#) [SUPPORT](#)

McIDAS
Ingest, Decode, Analyze, Display
Weather Satellite, Radar, Text, Grid, Obs

McIDAS-X
*Display, manipulate, and analyze
Weather Satellite, Radar, Text, Grid & Obs*

McIDAS-V
Real-time operational
& research software
since 1973

McIDAS-XCD
Free, open source 3D
Visualization

**SDI GRB
Appliance**
Ingest and serve
GOES-16 and -17

[Learn More »](#) [Learn More »](#) [Learn More »](#) [Learn More »](#)

What's New in 2019 – New McIDAS Website

SSEC Search McIDAS

McIDAS
Man computer Interactive Data Access System

HOME ABOUT **MCIDAS-X** MCIDAS-V MCIDAS-XCD INGESTORS LICENSING SUPPORT

About Download Documentation Sample Capabilities

McIDAS-X Sample Capabilities

Satellite Imagery

©2019, COMPOSITE IMAGE WILL POWER AND OBSERVATIONS BY TERRA, AQUA, AND SPOT SATELLITES

INFRARED COMPOSITE FROM 25 FEB 05 AT 18:00 UTC (SSEC-DM-IND0501)

Model Data

HOME ABOUT **MCIDAS-X** MCIDAS-V MCIDAS-XCD INGESTORS LICENSING SUPPORT

About Download Documentation Sample Capabilities

Download McIDAS-X

McIDAS-X 2019.1 – released 10 Sep 2019

McIDAS-X Software & Installation for Unix

2019.1 Installation Instructions for Unix

Download (e.g., right-click and select Save) the following files to the `~mcidas` directory on your McIDAS-X workstation.

- Install/uninstall script (28 KB)
 - `mcidas2019.1.sh`
- Source/data files (278 MB)
 - `mcidas2019.1.tar.Z`
- ADDE remote server configuration script (18 KB)
 - `mcinet2019.1.sh`

McIDAS-X Software & Installation for Windows

2019.1 Installation Instructions for Windows

Download (e.g., right-click and select Save) the following files to the `~mcidas` directory on your Windows7 workstation.

- Install/uninstall script (20 KB)
 - `mcidas2019.1_win7.sh`
- Source/data/binary files (235 MB)
 - `mcidas2019.1_win7.tar.gz`
- environment variables used by McIDAS-X (8 KB)
 - `mcidas.mcnv`



What's New in 2018 – McIDAS-X Releases

2018.1 – May 2018

- RGBDISP displays RGB images in McIDAS image frames
- GLMDISP/GLMLIST for 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 case-insensitive: NO MORE ALL CAPS!!!

2018.2 – December 2018

- Promoted Suomi-NPP (–XRD to –X) for NOAA-20 VIIRS
- Improvements for GOES-17



What's New in 2019 – McIDAS-X Releases

2019.1 – September 2019

- GOES 16/17 ABI Updates
 - TDQF – Temperature Data Quality Flags
 - Server updates for NOAAPort distributed image tiles and to better handle corrupt files from GRB
- VIIRS server improvements
 - Better performance
 - Allow for larger datasets – up to 20,000 files
- added DAY= and TIME= to IMGPROBE and alt-D
- updated FRMLABEL, RGBDISP, ZA
(DAYJ) placeholder = 16 SEP 2019259
- updated GOES descriptions: GOES-16 instead of G-16 IMG



What's New in 2019 – OS Support for –X

Vendor	Operating Systems	Compilers Supported
Apple	macOS 10.13.6	gfortran/gcc 7.3
	macOS 10.14.6	gfortran/gcc 8.3

We'll evaluate 10.15 (release date - Oct 2019) when it's supported at the University of Wisconsin SSEC, and then support only 10.14 and 10.15.



What's New in 2019 – OS Support for -X

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

Windows 7 End of Life is January 14, 2020

What's next for McIDAS users on Windows?



What's New in 2019 – OS Support for -X

Windows 7 End Of Life is January 14, 2020

McIDAS Support

- Windows 7 - Support will end with last 2019 release
- Windows 8 - No plans to support Windows 8
- Windows 10 support options:
 - Windows Subsystem for Linux (WSL)
 - New Windows 10 feature that enables you to run native Linux command-line tools directly on Windows
 - Preliminary test results are encouraging!
 - Linux Virtual Machine



What's New in 2019 – OS Support for -X

Vendor	Operating System	Compilers Supported
Red Hat	Enterprise Linux WS	
	6.10 Intel	gfortran 4.4.7 gcc 4.4.7
	7.7 Intel	gfortran 4.8.5 gcc 4.8.5

- We will begin evaluating 8.0 (released in May 2019) soon and then support only RHEL 7 & 8 in 2020.



What's New in 2019 – OS Usage for -X

- A survey was conducted in September 2015 and again in October 2017 with **100%** McIDAS sites reporting.
A new survey will be coming this fall...
- Only one question -- *What operating system(s) are you using on your machines running McIDAS-X?*

Operating System	# of Sites	Version(s) In Use in 2017
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 2019 – 2019 MUG Fees Announced

2020 MUG Fees

McIDAS (increased 5% over 2019)

SX (1-2 workstations) \$11,400

DX (3-5 workstations) \$22,800

MX (6+ workstations) \$45,600

XCD (increased 5% over 2019) \$16,560

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



What's New in 2019 – New MUG Members

- SEMAR (*Secretaria de Marina*)
– Mexican Naval Secretariat (1 year)
- IMAA/CNR
– National Research Council of Italy,
Institute of Methodologies for Environmental
Analysis
- No sites dropped MUG Membership



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)

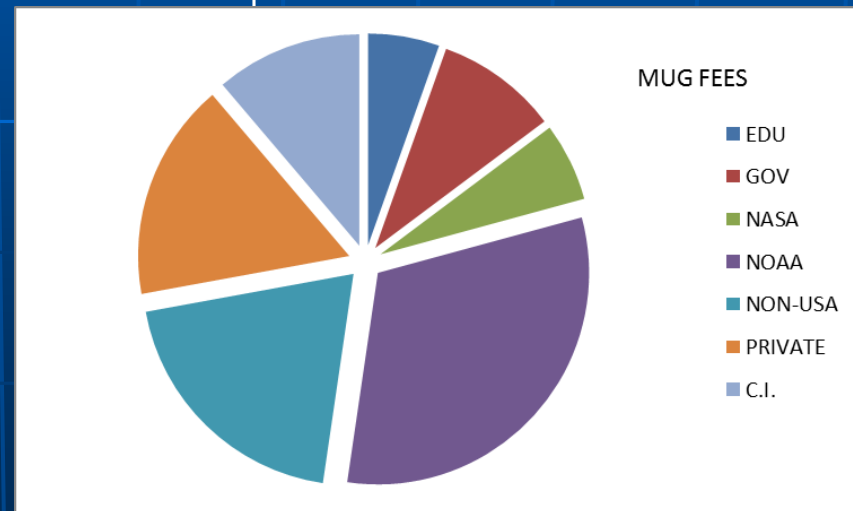
AccuWeather, AST,
Boeing, ClearAg,
DTN, ENSCO,
IBM the Weather Co,
StormGeo, Telvent

EDUCATION (1)

Unidata

Non-USA (6)

AEMET,
Australia BoM,
EUMETSAT,
Green Power Labs,
HKO,
IMAA/CNR



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



Who uses McIDAS-V?

from the usage statistics

	2014	2016	2018
Total Uses*	370 K	1.31 M	2.43 million!!
Forum Posts	692	615	275

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

Interpret the Statistics...

-V Forums have ~1100 users

Usage Statistics show
~4000 unique IPs in 2018

On pace to hit **10,000,000**
Total Uses in 2019!

Uses Up, but Forum Posts Down?



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 - answers from the Help Desk

McIDAS-V - answers from Help Desk or other forum users.

Users of McIDAS-V are encouraged to answer forum questions of other users and share their knowledge & expertise.

		2016	2017	2018
McIDAS-X Inquiries	total	248	247	217
	non-SSEC	141	166	123
McIDAS-V Inquiries	total	236	146	132
	non-SSEC	46	30	24
McIDAS-V Forum Topics		124	89	57



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 2019
 - Larger datasets mean larger images, maps, and grids → improvements have been made
 - -X tcl/tk GUI more fragile with each OS upgrade
 - Display Quality Issues with fonts and labels



Looking for more user input!

1. Use the McIDAS-V Support Forums or contact the McIDAS Help Desk
2. Fill out the MUG Meeting Survey at the end of the meeting on Tuesday
 - 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?
 - Add your comments on the back of the survey!
3. If you have specific development needs, contact the Help Desk or contact me about helping to fund site-specific 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.
It's not going away!
- 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!!!

