

MUG Status Update

Becky Schaffer - McIDAS Program Manager

2023 McIDAS Users' Group Meeting

Pyle Center - Room 332

University of Wisconsin

Madison, Wisconsin

September 25 - 28, 2023

<https://www.ssec.wisc.edu/mcidas>

MUG Status Update

- **MUG Personnel**
- **What's New in 2020, 2021, 2022, 2023**
- **Who uses McIDAS-X and McIDAS-V?**
- **McIDAS User Support**
- **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 documentation & programming

Jay Heinzelman: Help Desk & testing

-X documentation & programming

Dave Parker: Systems programming

Barry Roth: Retired in 2021

MUG Personnel Programmers

McIDAS-X

SSEC:

Russ Dengel

Rick Kohrs

Scott Lindstrom

Tim Olander

Sophia Reiner

Dave Santek

Unidata:

Tom Yoksas

McIDAS-V

SSEC:

Tommy Jasmin

Pragati Maheshwary

Tom Rink

Unidata:

Julien Chastang

Yuan Ho

MUG Personnel Unidata Collaboration

Working Together on VisAD, IDV, McIDAS-V and McIDAS-X

- **Monthly –V / IDV Teleconferences**
- **MUG Testers helping to test new functionality in IDV**
- **Code exchanges between McIDAS-V and IDV**
- **McIDAS-X programming**

What's New in 2020?

McIDAS-X v. 2020.1

Significant Changes in 2020.1

- **Everyone transitioned from working at SSEC to working at home**
- **Added preliminary support for McIDAS-X on Windows 10 w/ WSL**
- **Added support for RHEL 8**
- **Updates to the GOES-R Series ABI Servers (16 & 17)**
- **Improvements to the archive servers allowing for data requests across multiple dates**

What's New in 2021?

McIDAS-X v. 2021.1

Significant Changes in 2021.1

- Full support for McIDAS-X on Windows 10 with WSL
- Update the GOES-R Series ABI Servers (preparing for 18 & 19)
- Add RGB command & pre-defined equations for ABI, AHI, MSG...
- Add support of database search capabilities for improved performance in the SDS for ABI archive and real-time
 - IMGLIST of one hour of ABI
 - FD: netCDF 68s using SQL <1s
 - MESO: netCDF 589s using SQL 1s
 - Funded by separate SSEC funds

What's New in 2022?

McIDAS-X v. 2022.1

Significant Changes in 2022.1

- Full support for McIDAS-X on macOS systems with Apple silicon m1 / m2 processors
- Updates to the GOES-R Series ABI Servers and added the enhancements used in the GOES Image Viewer (STAR)
- Add the new Meteosat Third Generation (MTG) pyADDE servers as the first operational servers written in Python – preliminary release
 - Funded as part of the NOAA / AMRDC Arctic Composites project

What's New in 2023?

McIDAS-X OS Support

Vendor	Operating System	Compilers Supported
Apple	macOS 12.3 Apple processor	gcc / gfortran 12.2
	macOS 12.2 Intel processor	gcc / gfortran 11.2
	** will support macOS 13 Ventura in McIDAS-X v. 2023.1 (December 2023)	

What's New in 2023?

McIDAS-X OS Support

Vendor	Operating System	Compilers Supported
Microsoft	Windows 10 with WSL (Windows Subsystem for Linux)	gcc / gfortran 9.30
	Ubuntu 20.04.2 LTS	
	** will likely support Windows 11 in McIDAS-X v. 2023.1 (December 2023)	

What's New in 2023?

McIDAS-X OS Support

Vendor	Operating System	Compilers Supported
Red Hat	Red Hat Enterprise Linux (RHEL)	gcc / gfortran 9.30
	RHEL 9.2	11.3
	RHEL 8.5	8.5
	RHEL 7.9	4.8.5

What's New in 2023?

New MUG Members

New MUG Members

- **Mexican Air Force – 2021**
 - **McIDAS-X and SDI**
- **Hidromet – 2023**
 - **McIDAS-X and SDI**
 - **In preparation for a new site in the Navy**

Who uses McIDAS-X?

Current MUG Members

<p style="text-align: center;">NOAA</p> <p>CLASS ESPC NCEP CENTRAL OPERATIONS NWS – JOHNSON SPACE CENTER NWS - PACIFIC REGION STAR</p>	<p style="text-align: center;">NASA</p> <p>COLUMBIA SCIENTIFIC BALLOON FACILITY LANGLEY RESEARCH CENTER</p>	<p style="text-align: center;">PRIVATE</p> <p>ACCUWEATHER AST – KWAJALEIN ATOLL BOEING ENSCO</p>
<p style="text-align: center;">NOAA – CI</p> <p>CIMSS/SSEC CIRA</p>	<p style="text-align: center;">GOVERNMENT / MILITARY</p> <p>CAPE CANAVERAL SFS NTSB PATRICK AFB CDD</p> <p style="text-align: center;">EDUCATION</p> <p>UNIDATA</p>	<p style="text-align: center;">NON-USA</p> <p>AUSTRALIA – BoM MEXICO – AIR FORCE MEXICO – HIDROMET SPAIN – AEMET</p>

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

1.62 MILLION Uses in 2022 !

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

16 MILLION Total Uses !

1450 Members of the McIDAS-V Forums !

Next Release in October 2023 !

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

	2022
McIDAS-X Inquiries	151
McIDAS-V Inquiries	36
McIDAS-V Forum Posts	50

McIDAS-X Inquiries are mostly from emails to the Help Desk.

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

McIDAS Support

How long will -X be supported?

- **SSEC plans to support McIDAS-X through the current GOES-R Satellite Series, which is currently listed as 2039**
NO END DATE IN SIGHT!!!
- **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 (1-2 times per year)**

McIDAS Support

How long will -X be supported?

- **SSEC plans to support McIDAS-X through the current GOES-R Satellite Series, which is currently listed as 2039**
NO END DATE IN SIGHT!!!
- **No plans for support fee structure changes**
- **Always looking for new funding sources**
 - **SSEC Funds – ABI python servers & database work**
 - **NOAA / AMRDC – MTG python servers**
 - **CIRA – VIIRS development**

McIDAS Support

How long will -X be supported?

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Important Programming & User Issues

- **ADDE written in Fortran and C – Python!**
- **XCD becoming brittle – beta coming soon!**
- **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**

McIDAS Support

How long will -X be supported?

- **SSEC plans to support McIDAS-X through the current GOES-R Satellite Series, which is currently listed as 2039**
NO END DATE IN SIGHT!!!
- **Especially with the availability of free GOES ABI viewers: We've had 3 large sites tell us that they've done studies to look for other options other than McIDAS**
 - **Their findings: McIDAS is the best!**
 - **Gave us a punch list on things to improve, sometimes with funding, sometimes with no funding**
 - **If you're looking for options, let us know. We can help!**

McIDAS Support

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 large sites using -X, -XCD and SDI -- still our #1 Priority**
- **McIDAS-X will be fully supported, updated & maintained at least through the GOES-R Series (2039)**
- **McIDAS-V usage still growing and user forums have been a success**
- **We're always looking for new funding sources, large or small**

In Summary...

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

THANK YOU!!!

In Summary...

Questions?