



HAQAST 4

Thank you!

Co-sponsors:



**Nelson Institute for
Environmental Studies**
UNIVERSITY OF WISCONSIN-MADISON

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**Center for Sustainability
and the Global Environment**
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Many thanks go to...

All things HAQAST4: Daegan Miller & Rhianna Miles

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HAQAST Supports 2 Types of Projects: Individual & Tiger Team

Sept. 2016

Sept. 2017

Sept. 2018

Sept. 2019

13 HAQAST Members' Proposed Initiatives
with stakeholders & Co-I collaborators

Now =

- 2/3 through individual projects
- End Year 1 Tiger Teams
- Start Year 2 Tiger Teams

Year 1 "Tiger Teams"
4 larger collaborations
Focused, stakeholder-
based, short-term

Year 2 "Tiger
Teams"
... just announced



Past

- Building on AQUEST success with US AQM ... growing health engagement
- ~30 publications so far + software + data + algorithms
- Quasi-monthly Tiger Team meetings with stakeholders
- 3 new guidance documents for SIPs
- 4 discussion-based meetings, format based on attendee reviews;
- Ongoing conversations with NASA + stakeholders to advance HAQAST-related initiatives
- 2 Tiger Team reviews, all reviewed by stakeholders (8-10 stakeholders per review)
- 642 newsletter subscribers via MailChimp
- 3800+ Twitter followers; 3000 discrete visitors to haqast.org
- Outreach websites airquality.gsfc.nasa.gov & <http://cimss.ssec.wisc.edu/education/gl/ttnox>
- ⁴ Tutorials, how-to's, annotated resource guide



NASA HEALTH AND AIR QUALITY APPLIED SCIENCES TEAM

Connecting NASA Data and Tools with Health and Air Quality Stakeholders

Search

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PROJECTS ▴

NEWS ▾

TOOLS AND RESOURCES ▾

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Tiger Teams

Publications

Our mission is to bring the power of NASA
science down to earth and into your life.

<https://haqast.org>



NASA HEALTH AND AIR QUALITY APPLIED SCIENCES TEAM

Connecting NASA Data and Tools with Health and Air Quality Stakeholders

Q Search

ABOUT PEOPLE ▾ PROJECTS ▾ NEWS ▾ **TOOLS AND RESOURCES ^** MEETINGS ▾ CONTACT ▾

Getting Started

Download Data

Tools

NASA ARSET
Training

AQAST 2011-2016

Links to Health and
Air Quality
Community

Glossary

Tutorials and webinars can be found here.

<https://haqast.org>



Air Quality

Observations from Space

Aura

EOS Project

OZONE HOLE WATCH

Search this site



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Mission Statement

Our goal is to show how satellite data of air pollution may be used for health, air quality, and agricultural/food security applications.

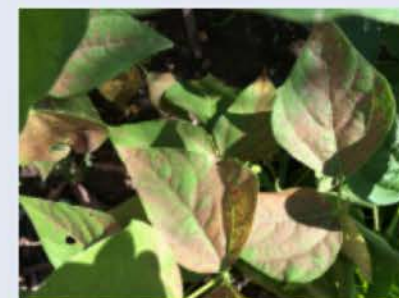
On this site, you'll find:

- **downloadable factsheets** (coming soon) on how satellite data are used in health research and air quality applications, including food security. Here are two draft examples:
- downloadable **images and animations** of air pollutants observed from space, including ones that demonstrate the efficacy of the U.S. Clean Air Act
- **numerous resources for data users**
- general information on air pollution
- **answers to frequently-asked questions (FAQs)**



We also provide examples of how health researchers and air quality managers are currently using satellite data. For further examples, please visit the website of the **NASA Health and Air Quality Applied Sciences Team (HAQAST)**, which has the goal to facilitate the use of NASA satellite data by the health and air quality communities.

NASA Food Security Initiative



NASA's **Food Security Initiative** promotes the use of Earth observations and Earth science data, models, and knowledge provide essential information and tools to support global food security.



NASA HAQAST IMPROVED NO_x EMISSIONS USING OMI TIGER TEAM NEWS & RESOURCES



Connecting to Stakeholders: PI Brad Pierce gave a briefing on the [2017 Lake Michigan Ozone Study](#) to the Business Advocacy Committee of the Sheboygan County Chamber of Commerce in Sheboygan, Wisconsin on April 7, 2017. The briefing discussed the objectives and measurement strategy used to characterize the recirculation, aging, and mixing of the Chicago and Milwaukee urban plumes as they move over Lake Michigan and their impact on surface ozone along the shore of Lake Michigan.

View the slides: [Lake Michigan Ozone Study Brief to Sheboygan County Chamber](#)



LMOS 2017 story on the WPR Blog: A Wisconsin Public Radio interview of some of the 2017 Lake Michigan Ozone Study (LMOS 2017) science leads aired on June 22, 2017, which was also that last day of the LMOS 2017 field campaign. An on-line version of the interview is available at <https://www.wpr.org/ozone-study-along-lake-michigan-seeks-answers-pollutant-drift>



On-Air Interview: Brad Pierce was invited to an on-air interview at the Wisconsin Public Radio (WPR) studios in Madison, Wisconsin on August 10, 2017 to discuss the 2017 Lake Michigan Ozone Study (LMOS 2017) with the hosts of WPR's Central Times. Listen at <https://www.wpr.org/study-examines-cause-high-ozone-levels-near-sheboygan>

<http://cimss.ssec.wisc.edu/education/gl/ttnox>



NASA HAQAST

@NASA_HAQAST

NASA Health Air Quality Applied Sciences Team (HAQAST), connecting NASA science with health and air quality (2016-2019). Tweets not official NASA communication

haqast.org

Joined December 2012

162 Photos and videos



Tweets 1,920 Following 832 Followers 3,865 Likes 28

Follow

Tweets Tweets & replies Media



NASA HAQAST @NASA_HAQAST · Jul 16

Good morning [#airquality](#) and [#publichealth](#) community!!

Today is the day - you can tune in to join our two-day workshop! Live streaming link will be at haqast.org/next-meeting

Last night we had an informal gathering at the @UWMadison Union Terrace — today we are expecting 150!



11

New to Twitter?

Sign up now to get your own personalized timeline!

Sign up

You may also like · Refresh



NASA HQ Emrg Mg...
@NASA_HQEM



NASAARSET
@NASAARSET



NASA Solve
@NASASolve



NASA LaserComm
@NASALaserComm



NASA TDRS
@NASA_TDRS

Worldwide trends

[#WorldEmojiDay](#)
129K Tweets

[#FelizMartes](#)
40.2K Tweets



Present (now → 2019)

- 5+ major in-person meetings (Madison, Vermont, DC, Phoenix, Phoenix, DC)
- Rapidly growing publication list → Many getting media coverage

[Note to HAQAST: Email Tracey/Daegan your pubs]

- New work/guidance on TROPOMI
- New guidance documents on haqast.org
- 4 Tiger Teams wrapping up; 4 new starting
- Ongoing conversations with NASA + stakeholders to advance HAQAST-related initiatives
- Final surveys of community perspectives on satellites for air quality and health & final report

January 6-10
AGU



A077: New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach."

January 3-4
HAQAST5



MARICOPA
COUNTYAZ



January 6-10
AMS



A077: New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach."

July 2019
HAQAST6



DEC 10-14
AGU



A077 New Directions for
S...
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Outreach."

**AUGUST 1 SUBMISSION
DEADLINE**

January 3-4
HAQAST5



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January 6-10

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A077: New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach."



DR. BRYAN DUNCAN



DR. ARLENE FIORE



DR. PATRICK
KINNEY



DR. RANDALL
MARTIN

January 3-4
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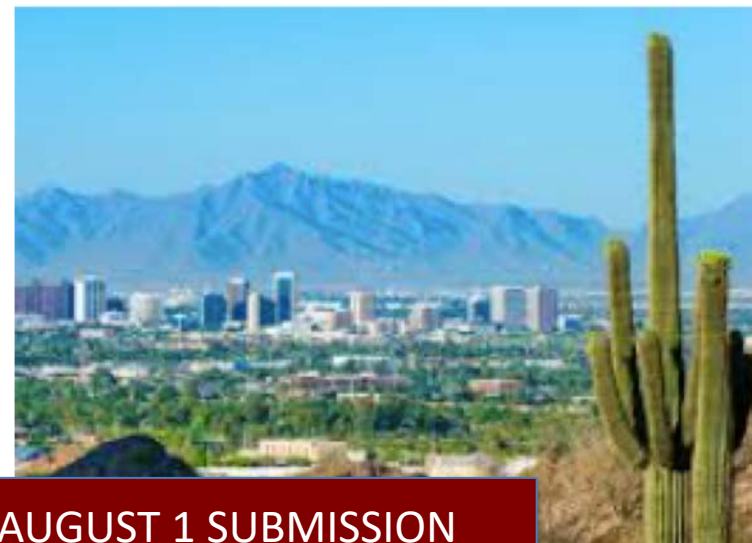


A077: New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach."

New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach

Host: **10th Conference on Environment and Health**

Cochairs: Michael Newchurch, University Of Alabama in Huntsville; Tracey Holloway, Univ. of Wisconsin; Susan Alexander, University of Alabama in Huntsville; Yang Liu, Emory Univ.



AUGUST 1 SUBMISSION
DEADLINE

July 2019
HAQAST6





Future – 2019 and beyond

How can we link NASA science with your organization?



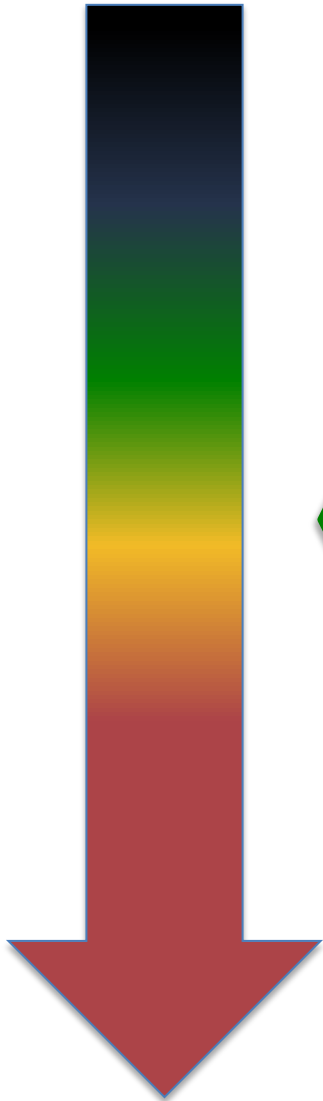
Unaware: What NASA data?

Uninterested: I don't think that NASA data are useful to me

Curious: I wonder if those NASA data could be useful to me?

Engaged: I'd like to start using those NASA data

Enthusiastic: These NASA data are indispensable!
Thanks, HAQAST!!





Future – 2019 and beyond

- Stakeholders using satellite data
- Relationships and awareness
- Knowledge, tools, resources developed
- Guidance documents available for future use
- Public data portals continue through NASA and other agencies (RSIG, Giovanni, KNMI, etc.)
- TROPOMI, TEMPO, GEMS, Sentinel-5
- Continue NASA Applied Sciences Support →

HAQASTv2?

