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Children's Health Alliance of Wisconsin (the Alliance)

Love My Air Denver Partnership:
Air quality monitoring
and no idle campaign

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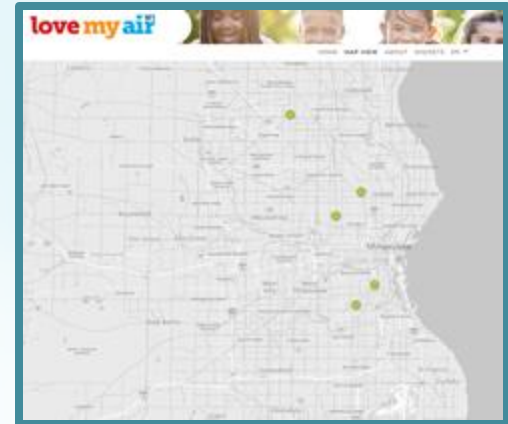
Love My Air Program

- Replicating Love My Air Denver
- Community air monitoring network
- Installation of low-cost air sensors at school sites (fixed and mobile)
- Pairs local, near-real time air quality information with education
- Resources/tools for individual and community action
- Invites the participation and guidance from community members



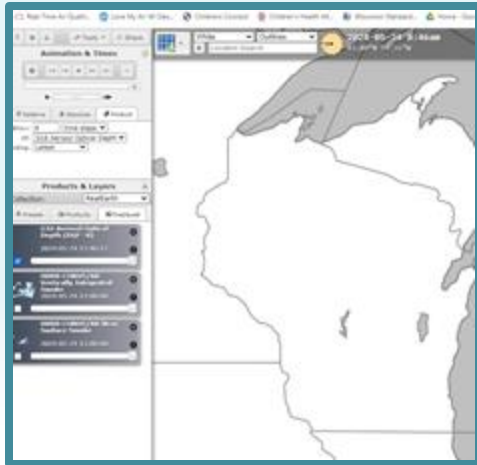
Love My Air Dashboard

- Love My Air Denver worked with SensibleIoT
- Intended audience: Students grades 1st - 12th, their families, and community members
- Limited to essential air quality information
- Sensors with quality assurance, visuals and AQI colors

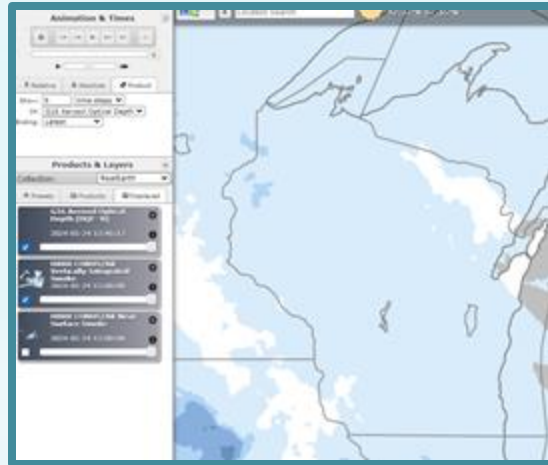


Satellite layer initial steps - more layers to create 'comprehensive' visual

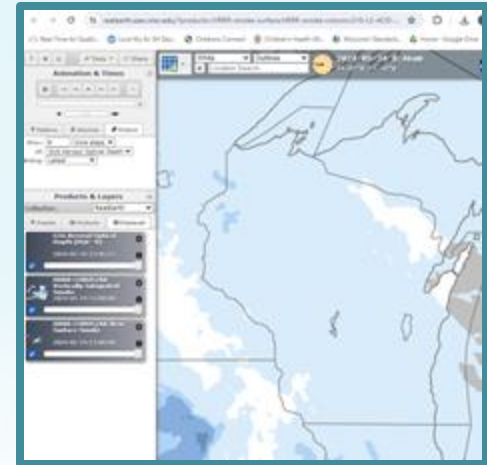
- Vertically integrated smoke
- Near Surface Smoke
- Cloud layer
- 'Movement' feature (if possible)



AOD



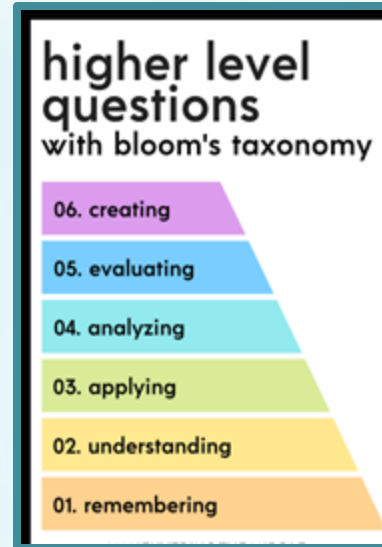
AOD and HRRR Vertically Integrated Smoke



AOD, HRRR Vertically Integrated Smoke and HRRR Near Surface Smoke

Love My Air Wisconsin: Introductory lessons to air quality and health

Grade Level	Air Quality Focus
K-5	<ul style="list-style-type: none">Learn about air quality and their healthKnow how to find air quality and understand what the colors mean
6-8	<ul style="list-style-type: none">Collect data and analyze it
9-12	<ul style="list-style-type: none">Interpret data, hypothesize and explore air quality and environmental factors





Air Quality and Your Health Lesson 3-5

Created by Teacher(s): Sarah Kroening | Published on: May 13, 2024

Lesson Plan

Grades 3-5

Created by Wisconsin Climate Education Hub teachers

Learning Outcomes



I can **explain** causes of outdoor air pollution and how to check outdoor air quality.

I can **describe** one way outdoor air quality impacts a person's health.

I can **identify** at least one way to improve outdoor air quality awareness.

love my air



Purple Air Real-Time Map Exploration

Teacher Directions	Possible Materials
<ol style="list-style-type: none">Students use the Air Quality Colors Chart and the Purple Air Real-Time map to explore real-time air quality.Students compare different places and analyze images of those cities to infer why the air quality is the same or different.Students can zoom out and look at air quality around the world or search images of different cities. Then, students infer why air quality is the same or different in those places.Students synthesize why air pollution is different depending on where you live and people's actions in response to the air pollution in their area.	<p>Computer and a link to this slideshow</p> <p>Air Quality Index worksheet (multiple versions available)</p>

Standards:

Social Studies: SS.GeogI.a.4-5, SS.EE.GeogI

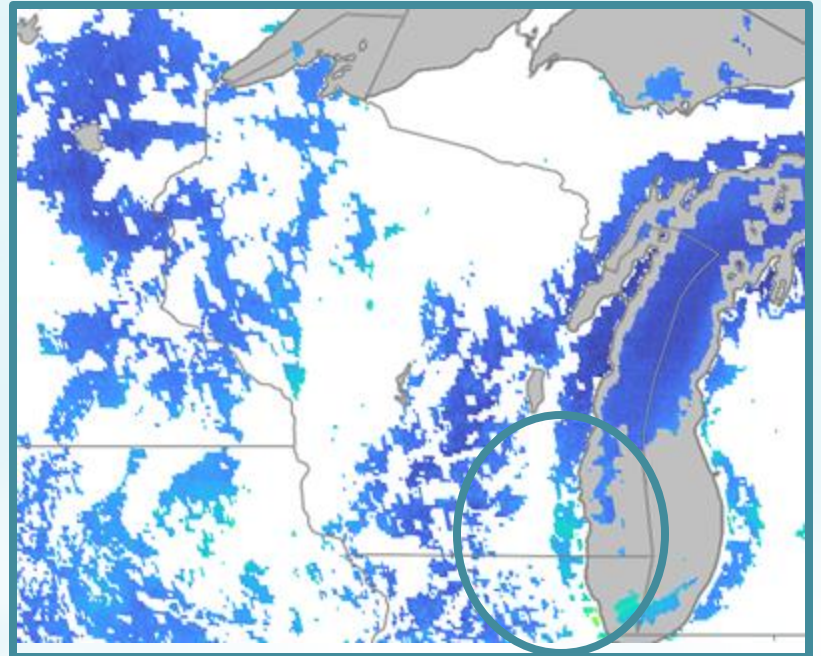
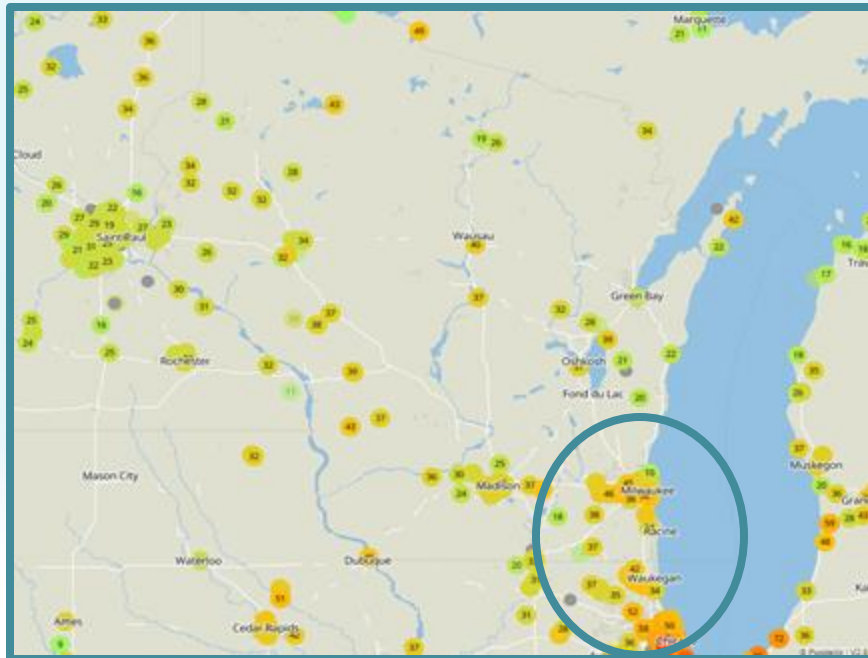
Differentiation:

S1: Students complete only the AQI chart.
Teacher picks a city to compare with Milwaukee.

S2: Students identify the country where each city is located and research for more information about air quality rules and regulations.
Students use graphs to further examine a ranking of the world's [most polluted cities](#) and [most polluted countries](#).
Students can also use this [US News report](#) to see images of the countries from the previous list.

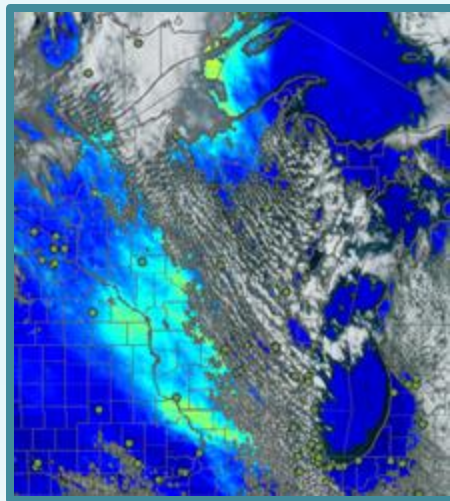
Satellite Data for 3rd-5th Grades

Students can use the satellite image to ‘defend’ their interpretation of air quality.

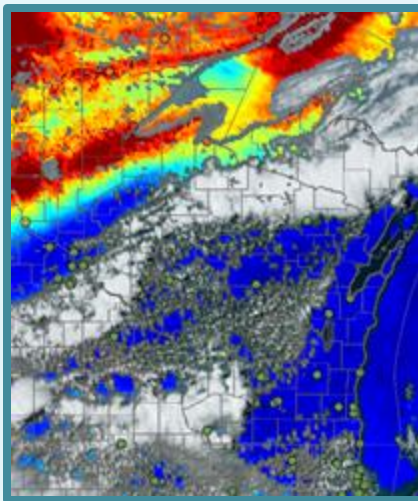


Satellite data high school

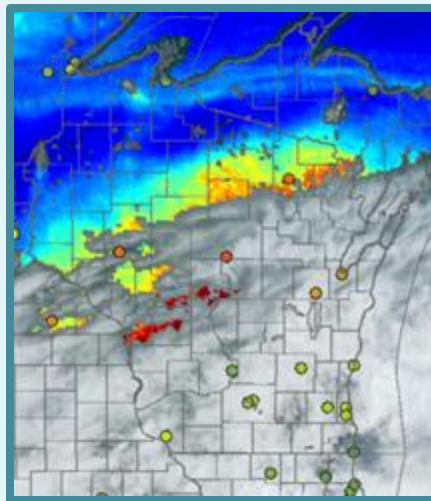
Students use satellite data to explore air quality events and build hypotheses



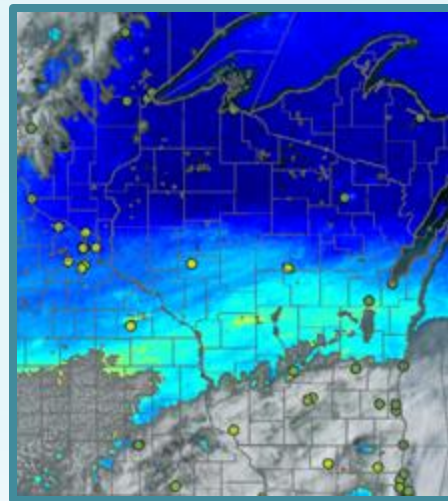
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5/13/24



5/14/24

Next Steps

- Create short trainings for teachers
- Provide lesson plans that explain how to incorporate this tool
- Collaborate on use of satellite layer: Wisconsin Department of Natural Resources (DNR), City of Madison, State of Colorado, LMA Denver
- Gain feedback from teachers and students and adjust as needed

**Visit the Alliance's Air Quality
webpage for resources!**



**Need help?
Please contact me!**



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