



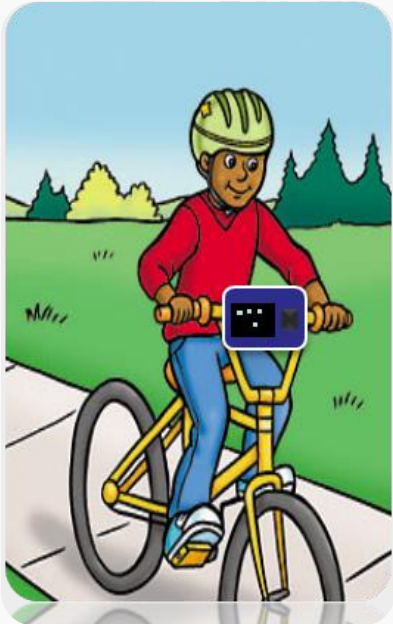
Piloting Next Gen Air Measurements, Engaging Citizen Scientists, and Inspiring STEM Leaders

– Village Green in SE Chicago

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U.S. EPA R5***

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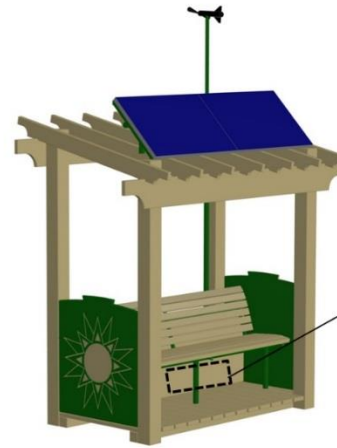
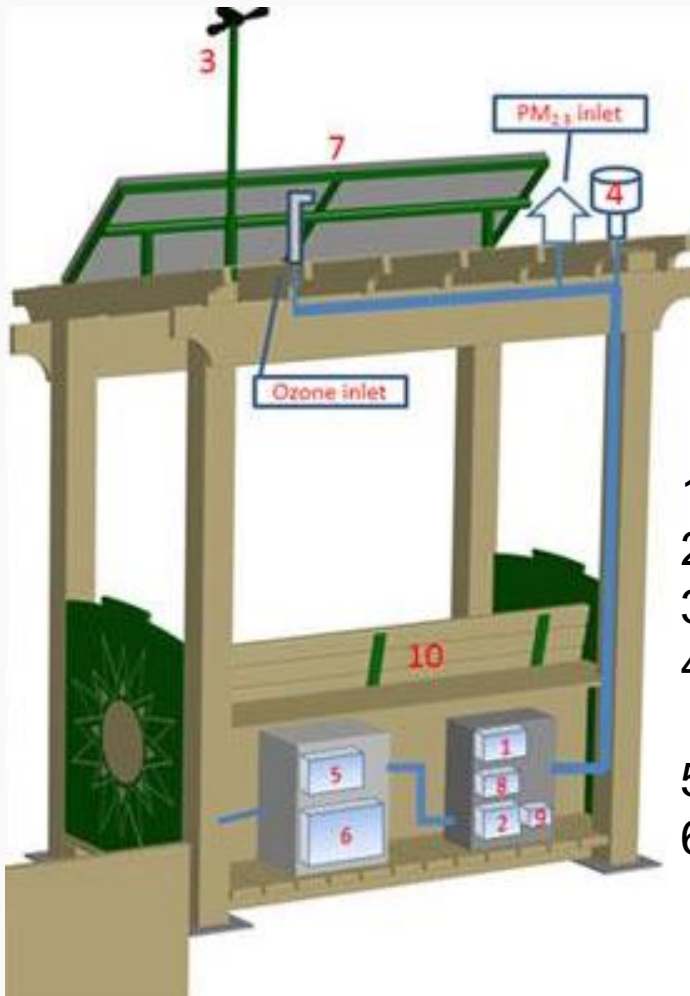
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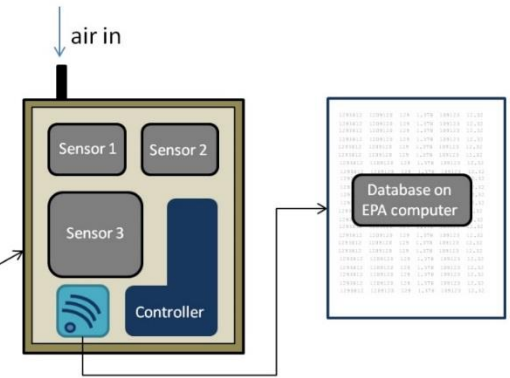


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Village Green

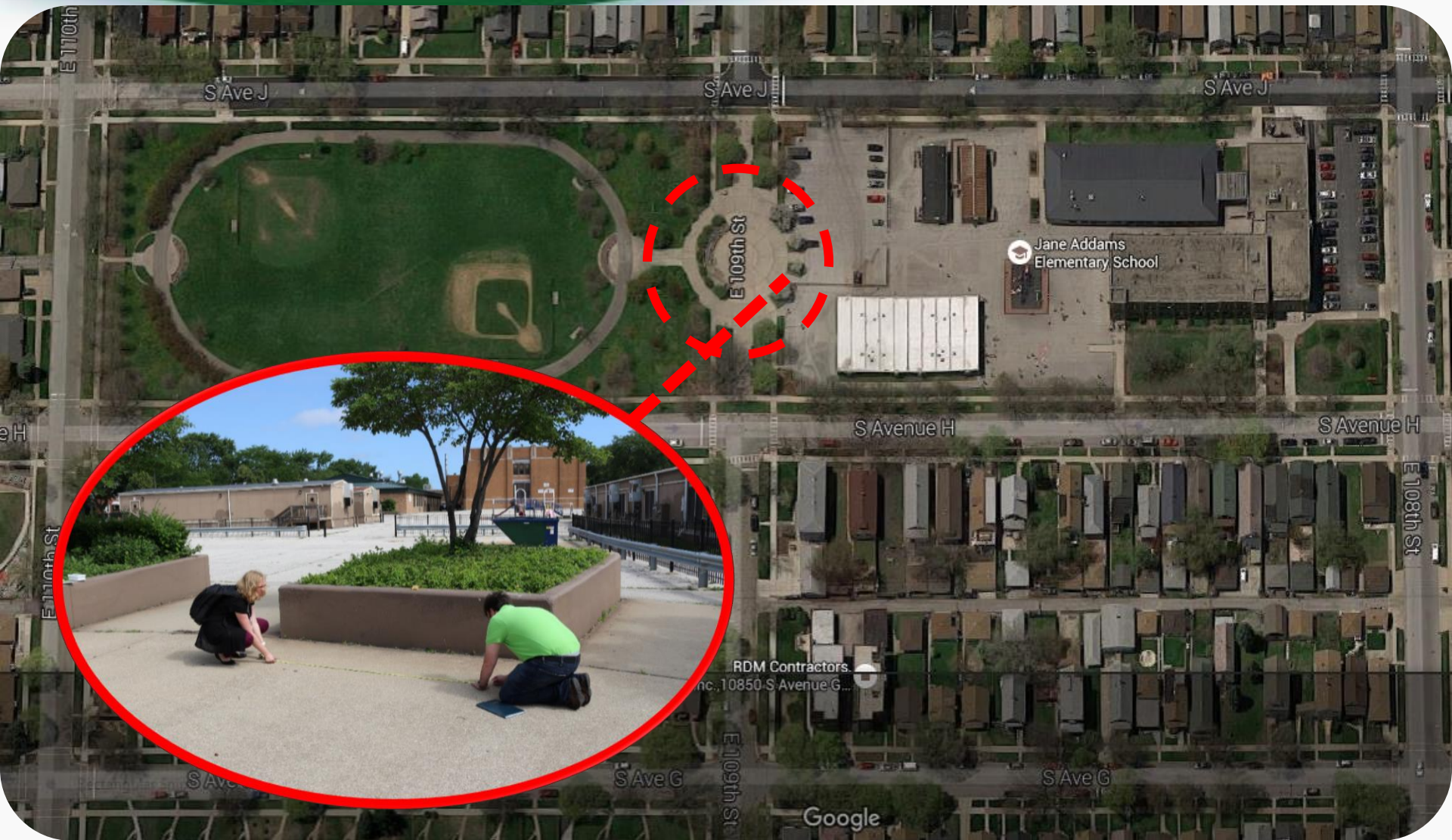


Schematic: Village Green air and weather station



1. Particulate monitor
2. Ozone monitor
3. Wind sensor
4. Humidity and Temperature sensor
5. Power controller
6. Absorbed glass mat battery
7. Solar panel/wind turbine
8. Microprocessor
9. Cellular router
10. Bench Structure

Jane Addams Elementary, SE Chicago





F750
SUPER DUTY

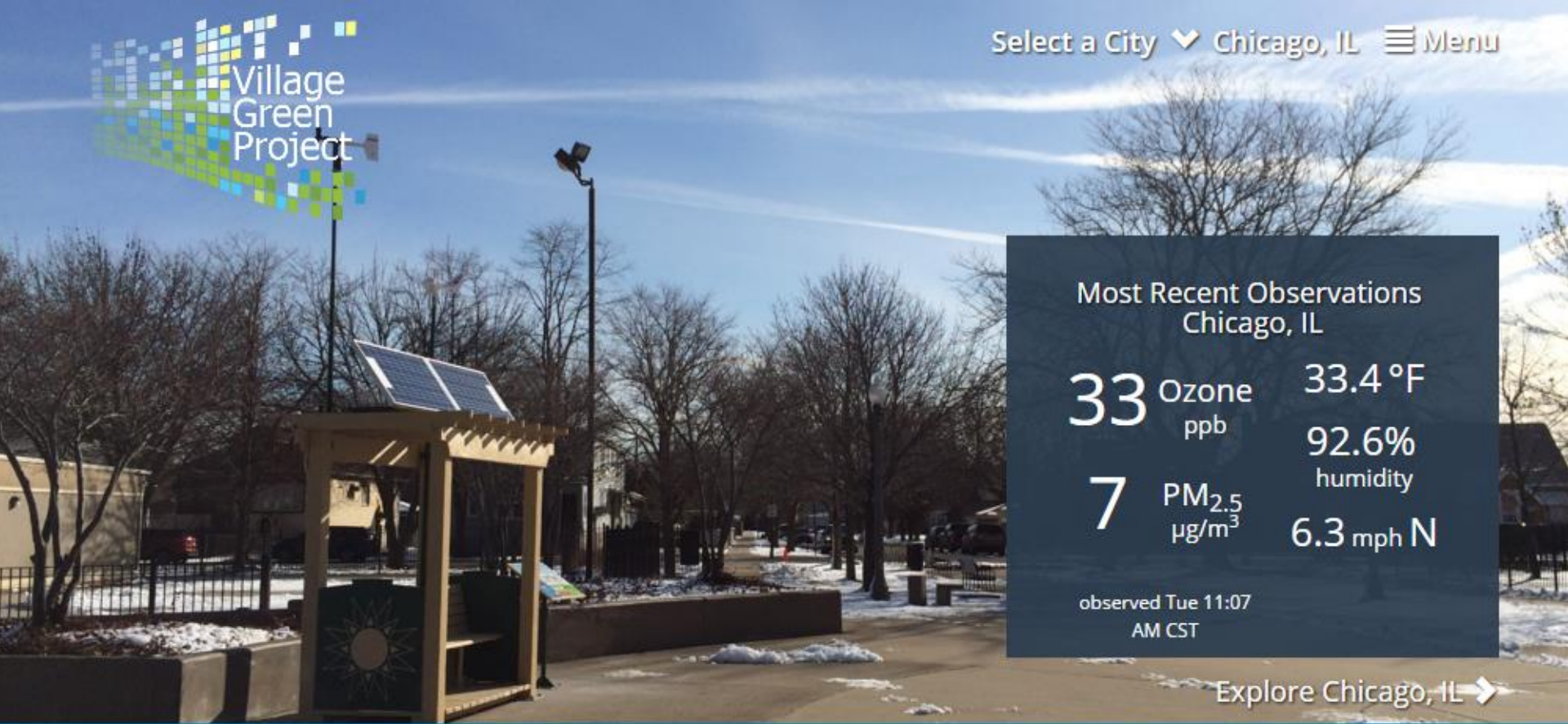












Most Recent Observations
Chicago, IL

33 Ozone ppb	33.4 °F
7 PM _{2.5} µg/m ³	92.6% humidity
	6.3 mph N

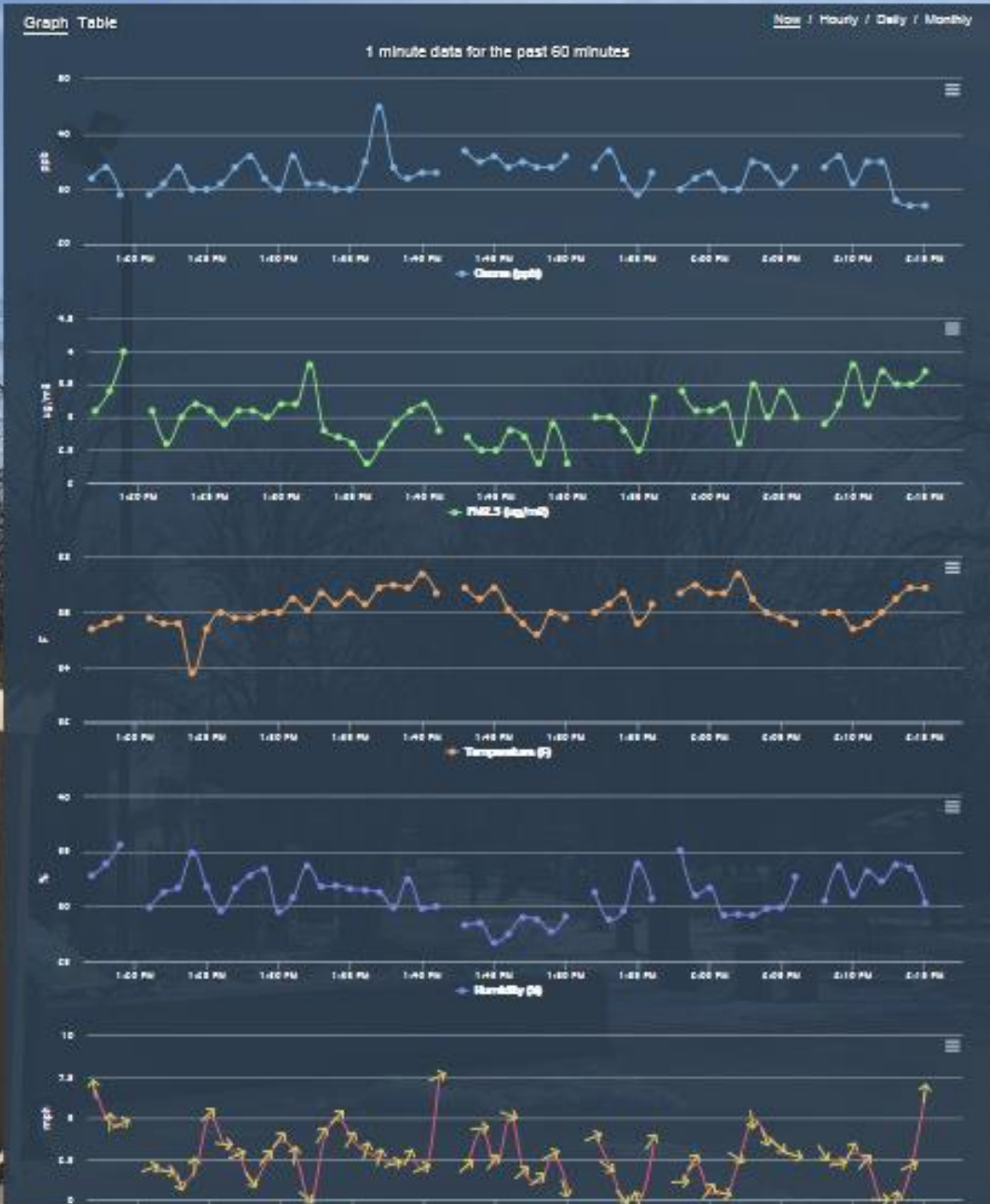
observed Tue 11:07
AM CST

[Explore Chicago, IL](#) ➔

Welcome to the Village Green Project

a research effort to discover new ways of measuring air quality and weather conditions in community environments.







As a result, the Village Green project helped
 1. reduce the amount of air pollution in the area.
 2. improve the quality of the air in the area.
 3. improve the quality of the water in the area.



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For more information on the Village Green project,
 visit www.villagegreen.org

About this Bench

This bench is part of the Village Green project, which monitors the
 pollutants that can impact your
 health, such as fine particles
 (PM2.5) and ozone (O3).



The real-time air quality data are sent to a public online
 database. The data are also available from a smartphone at
www.airnow.gov/villagegreen.



The data and other resources can be
 found at the Village Green Project's
 website. These data are intended for
 research and educational use only.

The Air Quality Index: As Important as Checking the Weather!

As you check the weather forecast
 every day, it's a good idea to
 check the air quality forecast, too.
 The Air Quality Index (AQI) is a
 scale that tells you how clean or
 polluted the air is, and whether
 outdoor activities like walking, jogging,
 and playing are affected by the
 air quality.

What Does the AQI Tell Us?
 The AQI is a scale from 0 to 500. The
 lower the AQI, the better the air quality.
 An AQI of 0-50 is considered good,
 51-100 is moderate, 101-150 is
 unhealthy for sensitive groups,
 151-200 is unhealthy, 201-300 is
 very unhealthy, and 301-500 is
 hazardous.

Check the AQI
 Check the AQI before you go outside.
 If the AQI is 100 or higher, it's a
 good idea to check the AQI again
 before you go outside.

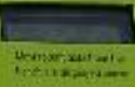


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 hazardous.

- If you are 65 or older, pregnant, or have a heart or lung condition, you should avoid outdoor activities when the AQI is 100 or higher.
- If you are 12 or older, you should avoid outdoor activities when the AQI is 150 or higher.
- If you are 12 or older, you should avoid outdoor activities when the AQI is 200 or higher.
- If you are 12 or older, you should avoid outdoor activities when the AQI is 300 or higher.
- If you are 12 or older, you should avoid outdoor activities when the AQI is 400 or higher.
- If you are 12 or older, you should avoid outdoor activities when the AQI is 500 or higher.

Air Quality Index (AQI) values — Where the AQI is in this range	Level of Health Concern — How it can affect you	Color and Symbolism
0-50	Good	Green
51-100	Moderate	Yellow
101-150	Unhealthy for Sensitive Groups	Orange
151-200	Unhealthy	Red
201-300	Very Unhealthy	Purple
301-500	Hazardous	Mars



What's the air quality and weather here now?

For more information on the air quality and weather here now, visit www.airnow.gov/villagegreen. The website has real-time air quality and weather data for the area.



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WELCOME TO
THE UG PROJECT

Most recent data from the
bench are displayed above

Bienvenido al
proyecto UG

Most recent data from the
bench are displayed above

Air Quality Index: As Important as Checking the Weather!

What Does the AQI Tell Us?

The AQI is a number that tells you how clean or polluted the air is, and whether the pollution is likely to be harmful to your health. It ranges from 0 to 500.

0-50 is Good, 51-100 is Moderate, 101-150 is Unhealthy for Sensitive Groups, 151-200 is Unhealthy, 201-300 is Very Unhealthy, and 301-500 is Hazardous.

Check the AQI

Check the AQI before you go outside. You can find the AQI on the EPA website or on a mobile app.

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What Can I Do to Lower My Risk to Air Pollution?

Check the AQI before you go outside. You can find the AQI on the EPA website or on a mobile app.

- If you are outside, wear a mask.
- If you are inside, keep your windows closed.
- If you have a car, don't drive it.
- If you have a lawn, don't mow it.
- If you have a pool, don't use it.
- If you have a garden, don't use pesticides.
- If you have a car, don't drive it.
- If you have a lawn, don't mow it.
- If you have a pool, don't use it.
- If you have a garden, don't use pesticides.



AQI Index (AQI) values and the AQI health range	Level of Health Concern and health conditions	Color and symbol(s)
0-50	Good	Green
51-100	Moderate	Yellow
101-150	Unhealthy for Sensitive Groups	Orange
151-200	Unhealthy	Red
201-300	Very Unhealthy	Purple
301-500	Hazardous	Magenta

What's the air quality and weather here now?

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The data and other resources can be found at the Wake Green Project's website. These data are intended for research and educational use only.

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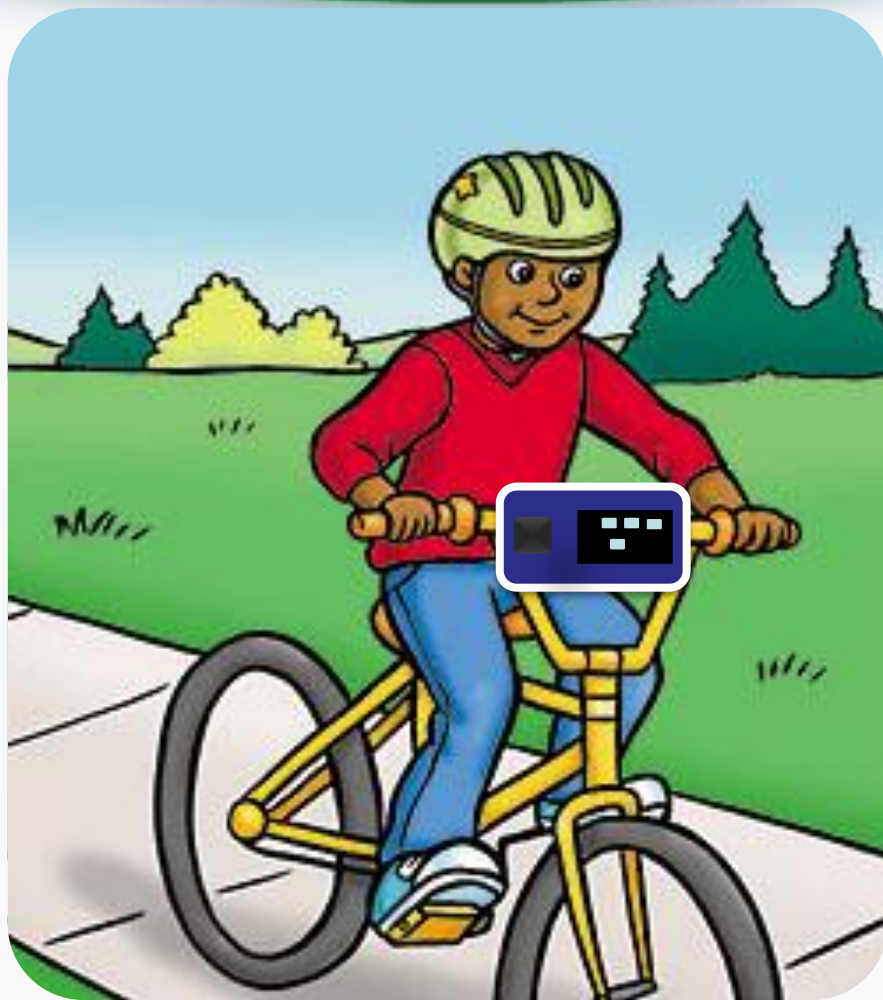
The Air Quality Index



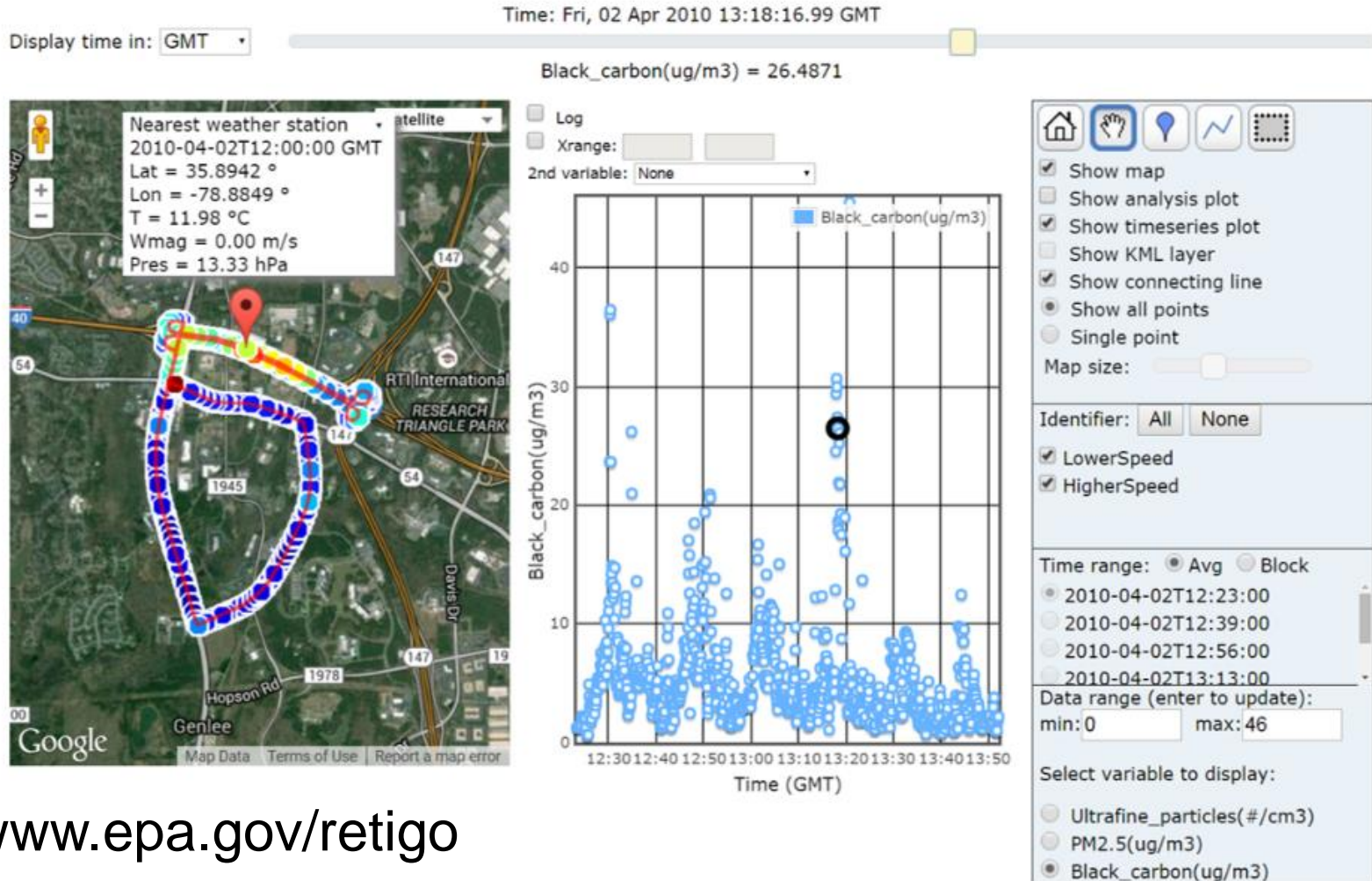
Not for interpreting non-regulatory data!

Air Quality Index (AQI) Values	Levels of Health Concern	Colors
<i>When the AQI is in this range:</i>	<i>..air quality conditions are:</i>	<i>...as symbolized by this color:</i>
0 to 50	Good	Green
51 to 100	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red
201 to 300	Very Unhealthy	Purple
301 to 500	Hazardous	Maroon

AirMapper



REal Time GeOspatial viewer (RETIGO)



www.epa.gov/retigo

Acknowledgements



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