

MEASURING URBAN AIR QUALITY USING LOW-COST SENSORS

A Citizen Science based approach

Florian Prummer – University of Salzburg

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2013: Kicking off the 'Year of Air'

change language

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Topics: Air pollution

Clean air will be the focus of EU environmental policy discussions throughout 2013, the Year of Air. The European Environment Agency (EEA) provides a wealth of information underpinning the review of air pollutant legislation.



Winner of 'Imaginair' youth prize Image © Dovyte Zubyte

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 Indoor air quality

Many of us might spend up to 90% of our day indoors — at home, work or school. The quality of the air we breathe indoors also has a direct impact on our health. What determines indoor air quality?

Read more

<http://www.eea.europa.eu/highlights/2013-kicking-off-the-2018year>

MOTIVATION

Citizen Science

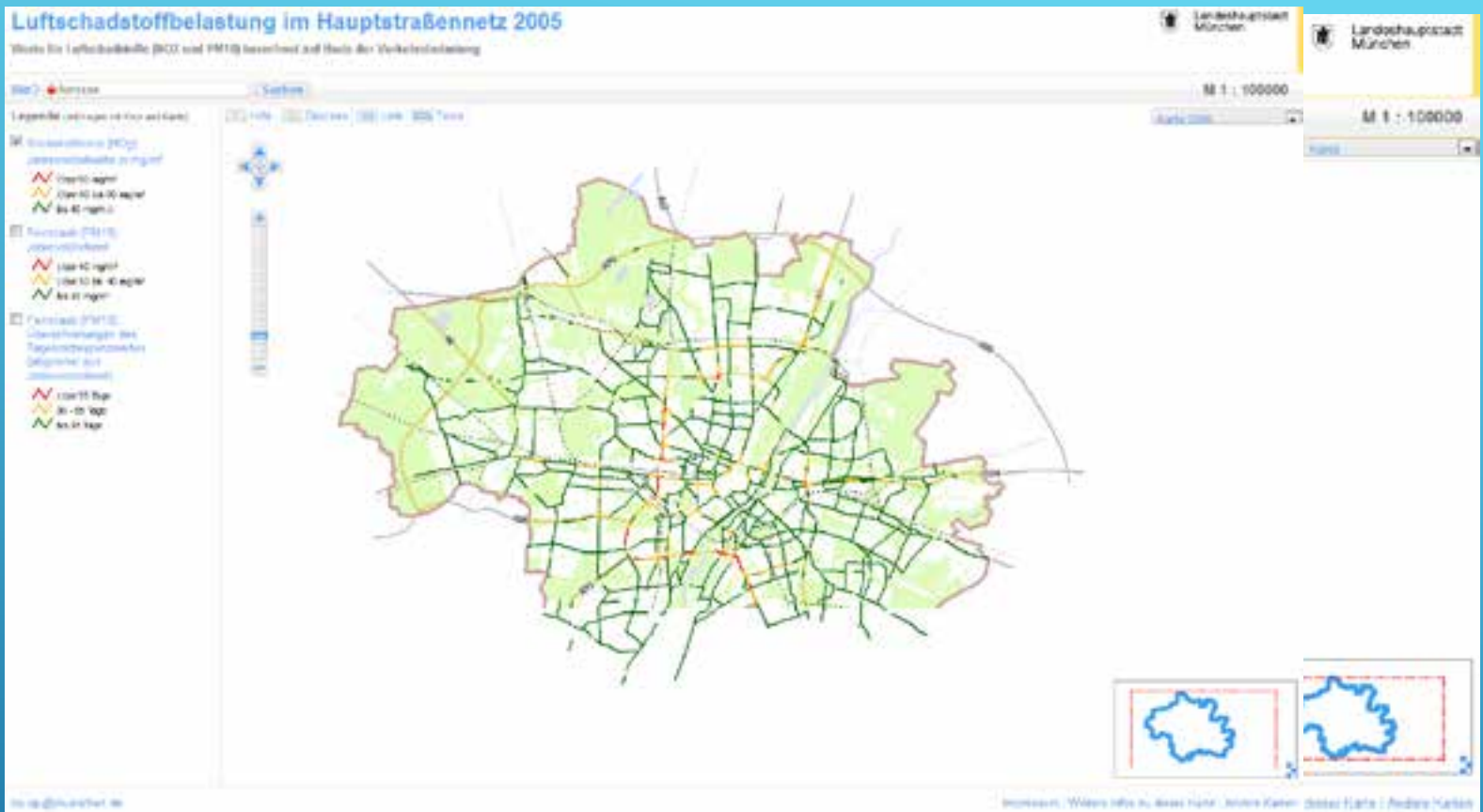
“ projects in which volunteers partner with scientists to answer real-world questions”

Approach

Use Citizen Science to overcome certain issues of classical methods of measuring urban air quality.



<http://europa.eu/citizens-2013/en/home>



<http://maps.muenchen.de/rgu/>

MASTER THESIS – APPROACH AND EXPERIENCE

#Air



Air Quality Egg

community-led sensing network

Serial Number:

ADD MY EGG

airqualityegg

airqualityegg Overview general

22 Nov 2012 Thomas (31k upvotes) 2

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A project aiming to give citizens a way to participate in the conversation about air quality. It is composed of a sensing device that measures the air quality in the immediate environment and an on-line community that is sharing this information in real-time. It is a community-developed, open source project that is driven by people who care about the air they breathe.

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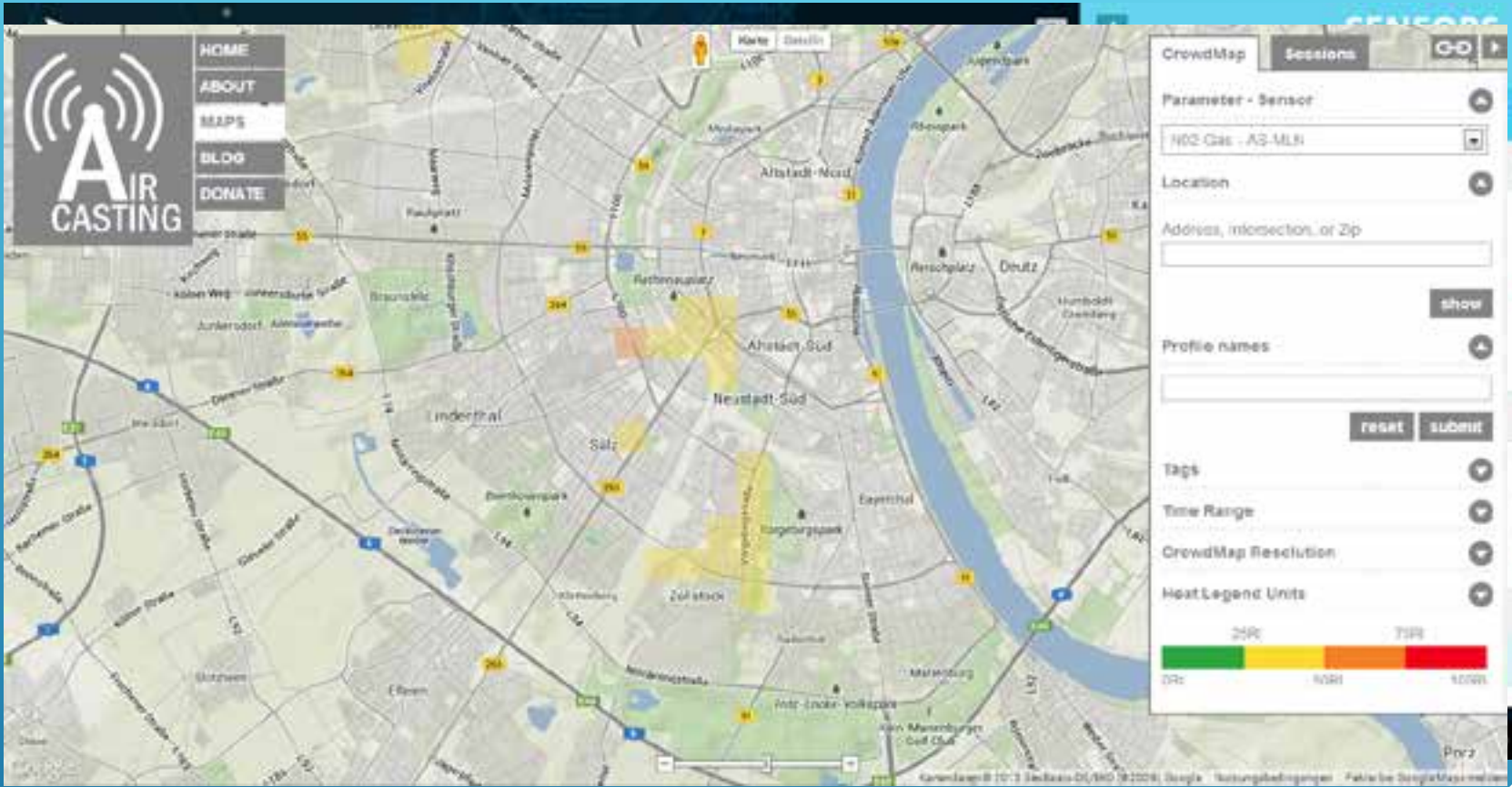
https://groups.google.com/forum/#!forum/airqualityegg



AIRQUALITYEGG

- „ Extend existing measurement network and analyze the acquired data
- „ Implementation using the sensor platform AirQualityEgg
- „ Occurrence of several issues

MASTER THESIS – APPROACH AND EXPERIENCE



<http://smartcityengine.com/>

OUTLOOK



Website: <https://envirocar.org/>

Unconference session: Workshop on Citizen Science!

Thank's
for your attention!