

GLOBE onderzoeksproject Fijnstof Chollandse

aluchten

Measuring air quality

an integrated approach with secondary school students and local governments

GLOBE NL

Dorien Dorresteijn & Willie Kerkhof





Particulate matter

- Using 'Snifferbike' mobile PM sensors (10/school)
- With RIVM (National institute for public health and the environment)
- With differentiated educational materials

NO₂ in the air

- Using Palmes diffusion tubes (10/school)
- With RIVM and KNMI (Royal Netherlands Meteorological Institute)
- Feedback from KNMI-scientist

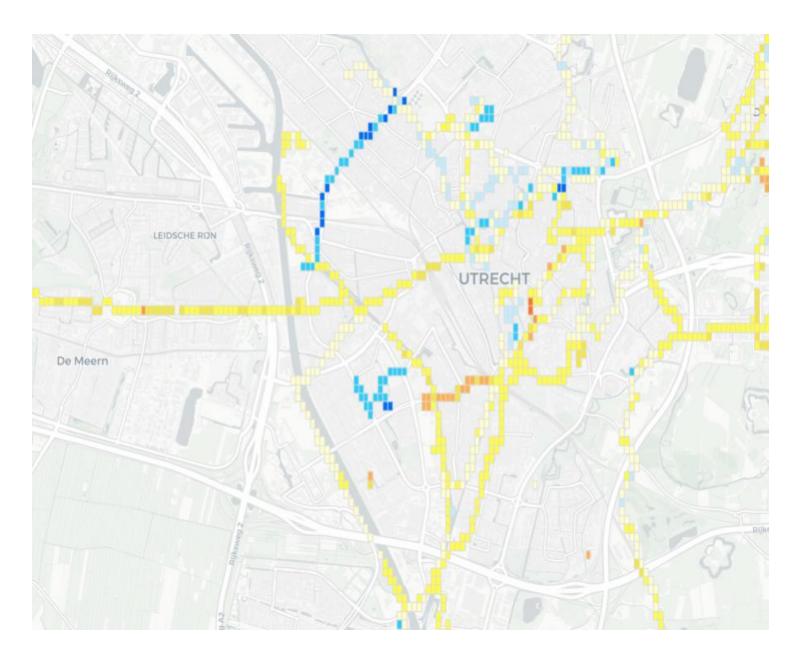
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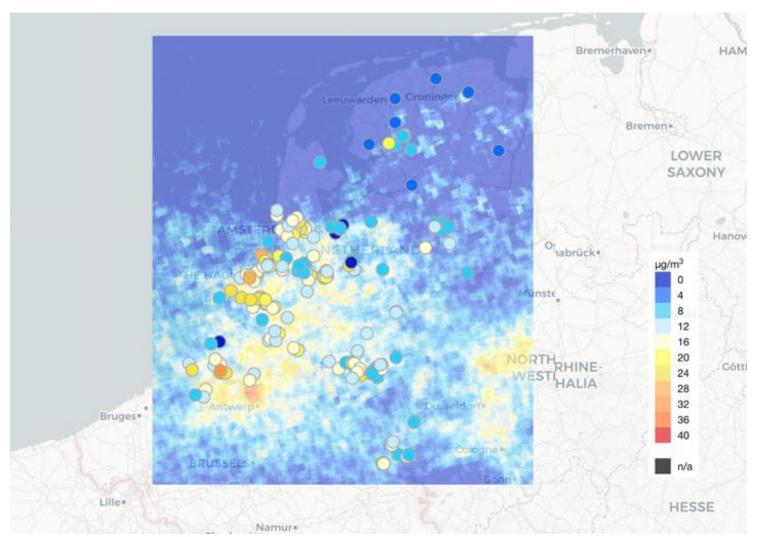
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D/school) health and

Particulate matter



NO₂ in the air



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URGENCY CLEAN AIR AGREEMENT



S months premature death (average) as a result of air pollution in 2016¹



health gain² in 2030 (compared with 2016) for the health effects from Dutch sources





4.000-5.000

fewer deaths/year as a result of air pollution in 2030



Participatie en citizen science





The project:

- GLOBE NL facilitates local/regional govts. in implementing CAA policy
- Schools do GLOBE (PM and/or NO₂), sensors provided by govts.
- Students do real world citizen scienceresearch and get to present their findings to local govt. officials

Results so far:

- 700+ PM sensors, 500+ NO₂ sensors
- 30+ participating municipalities (local) and provinces (regional)
- 40+ secondary schools
- Several govts reserved funds and expressed intention to continue













Tailor-made solutions for participating municipalities

Contracting schools

Kick-off meeting at e.g. town hall

Final student presentations at e.g. town hall

Custom project website Designing custom lessons

Guests lessons at schools

Online meetings with teachers

PR / Communications support

Provide snifflerbike sensors and Palmes tubes to schools

Technical support







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April-September 2018

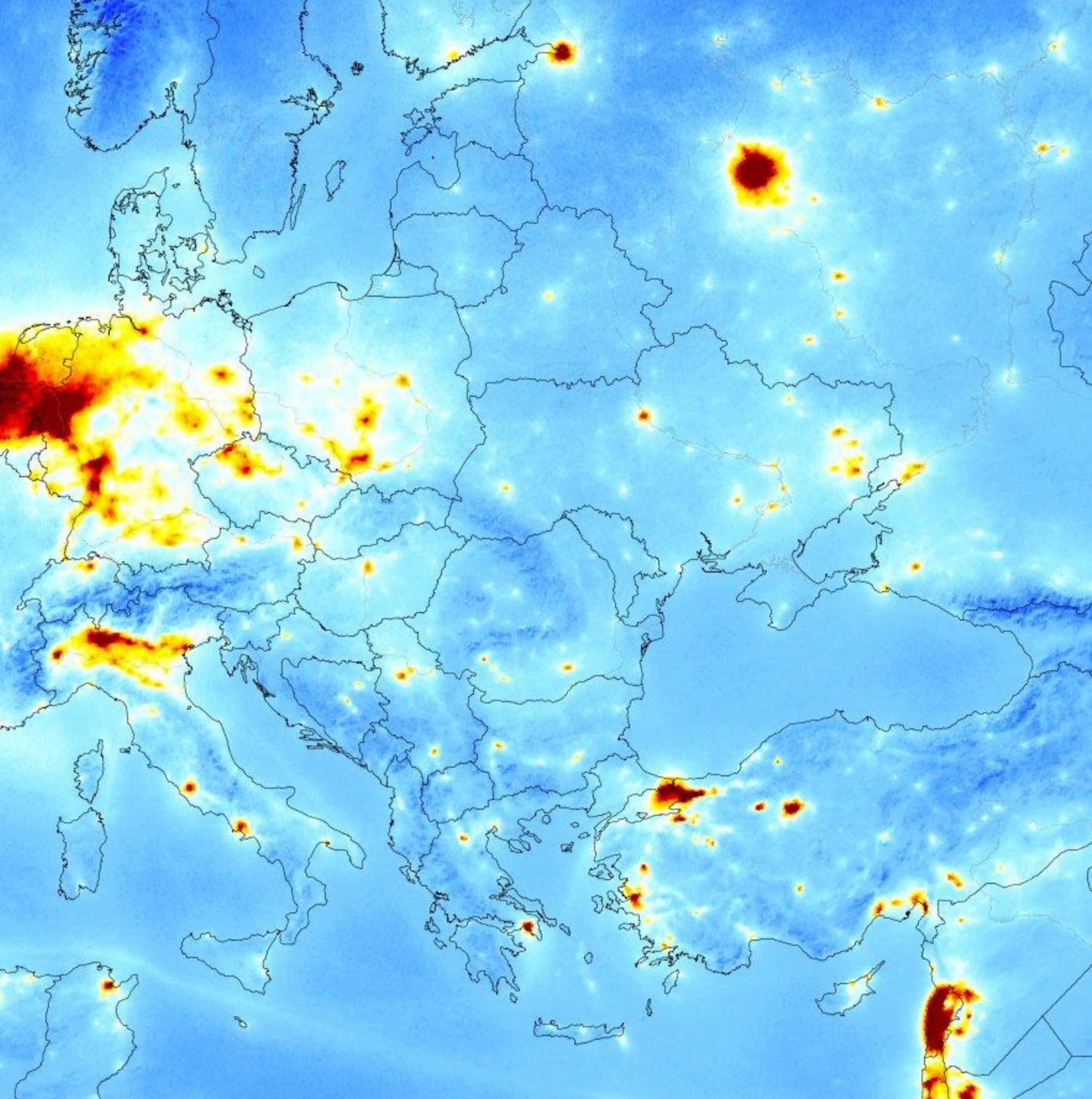
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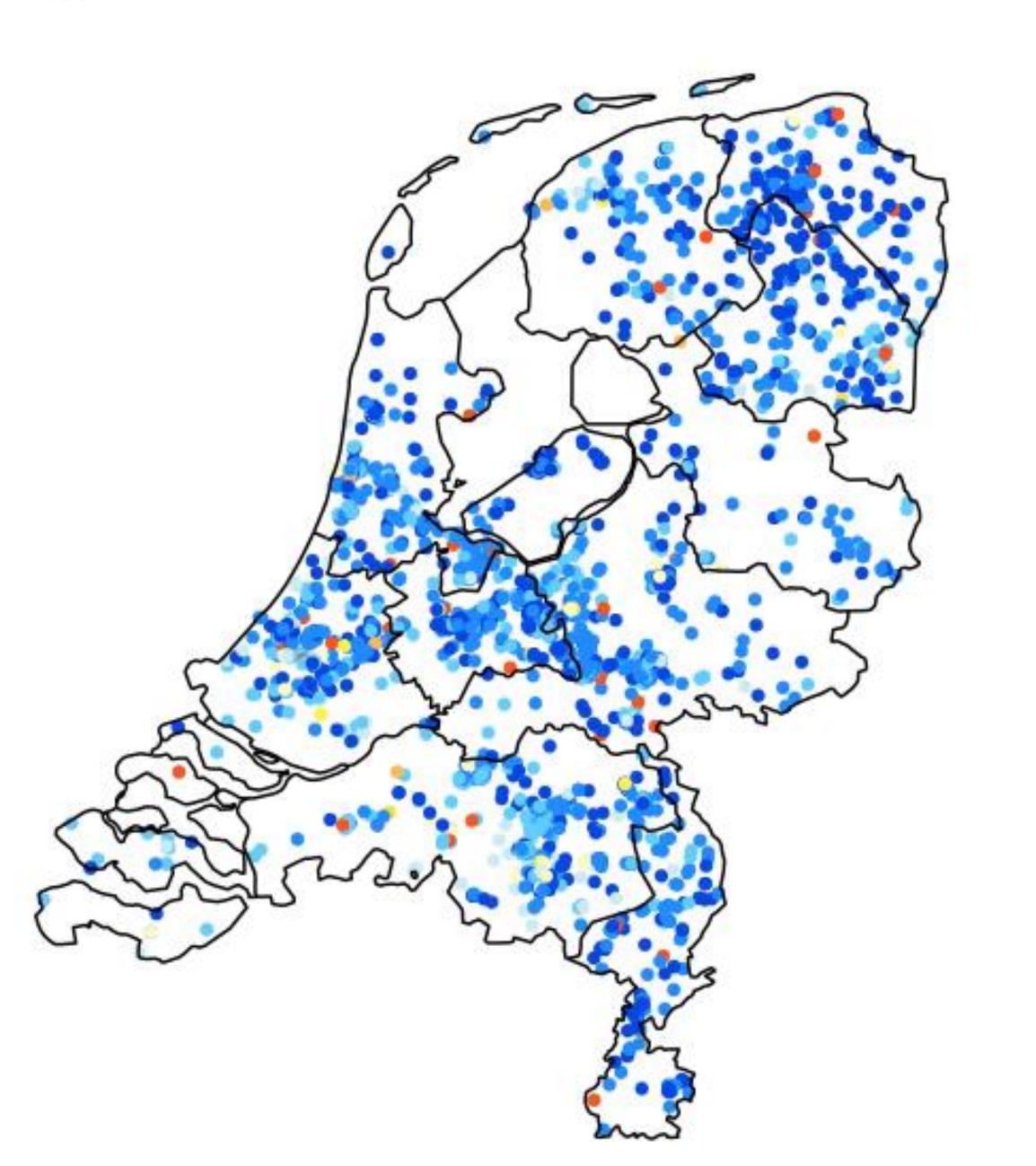
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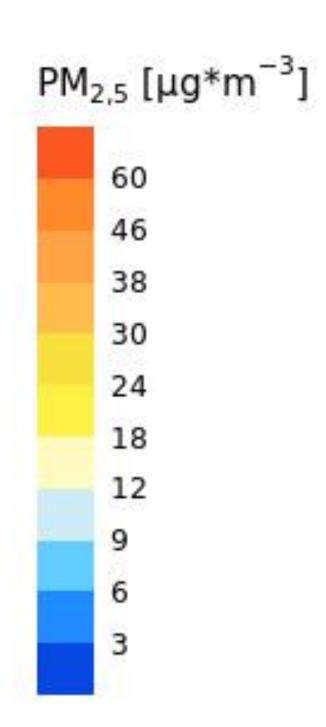
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Fijnstof (PM_{2,5}) gekalibreerde sensormetingen zaterdag 30 december 11:00 tot 12:00







Particulate matter

