



AirMonTech



Welcome

to the 3rd AirMonTech Workshop
Current and Future Urban Air Quality Monitoring
Duisburg, 04-05/03/2013



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AirMonTech



How do we see urban air quality monitoring in 2020?

Thomas Kuhlbusch and the AirMonTech Consortium
3rd AirMonTech Workshop
Duisburg, 04-05/03/2013

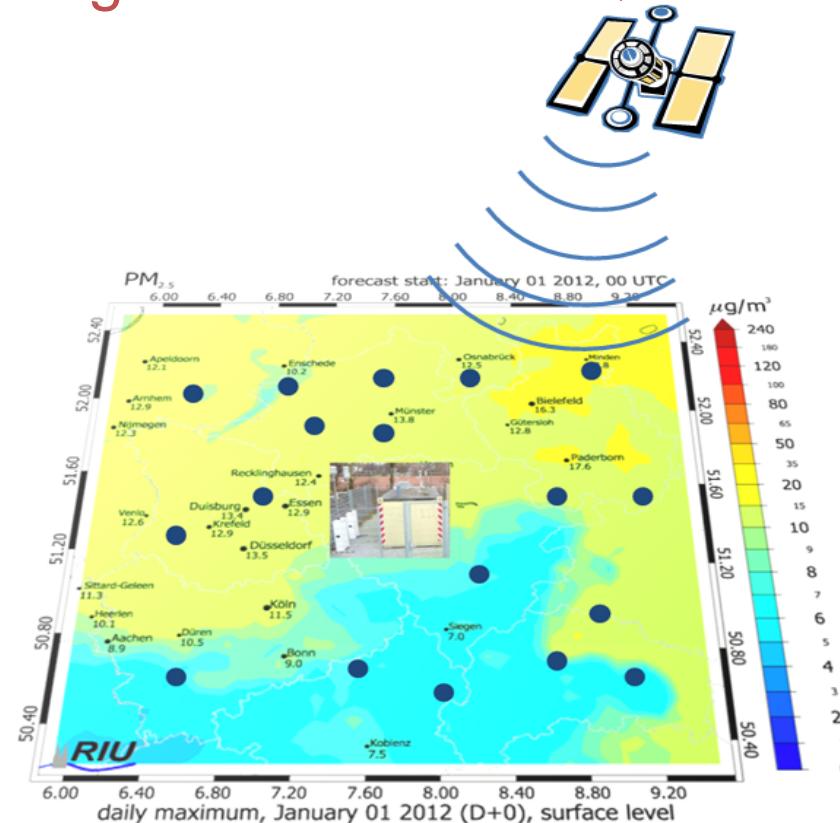


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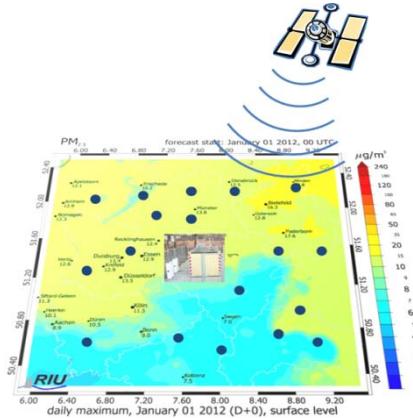
Monitoring

How does the future urban AQ monitoring network have to be designed?

Combination of fixed, mobile monitors and sensors together with remote sensing into an urban AQ monitoring design?



Monitoring



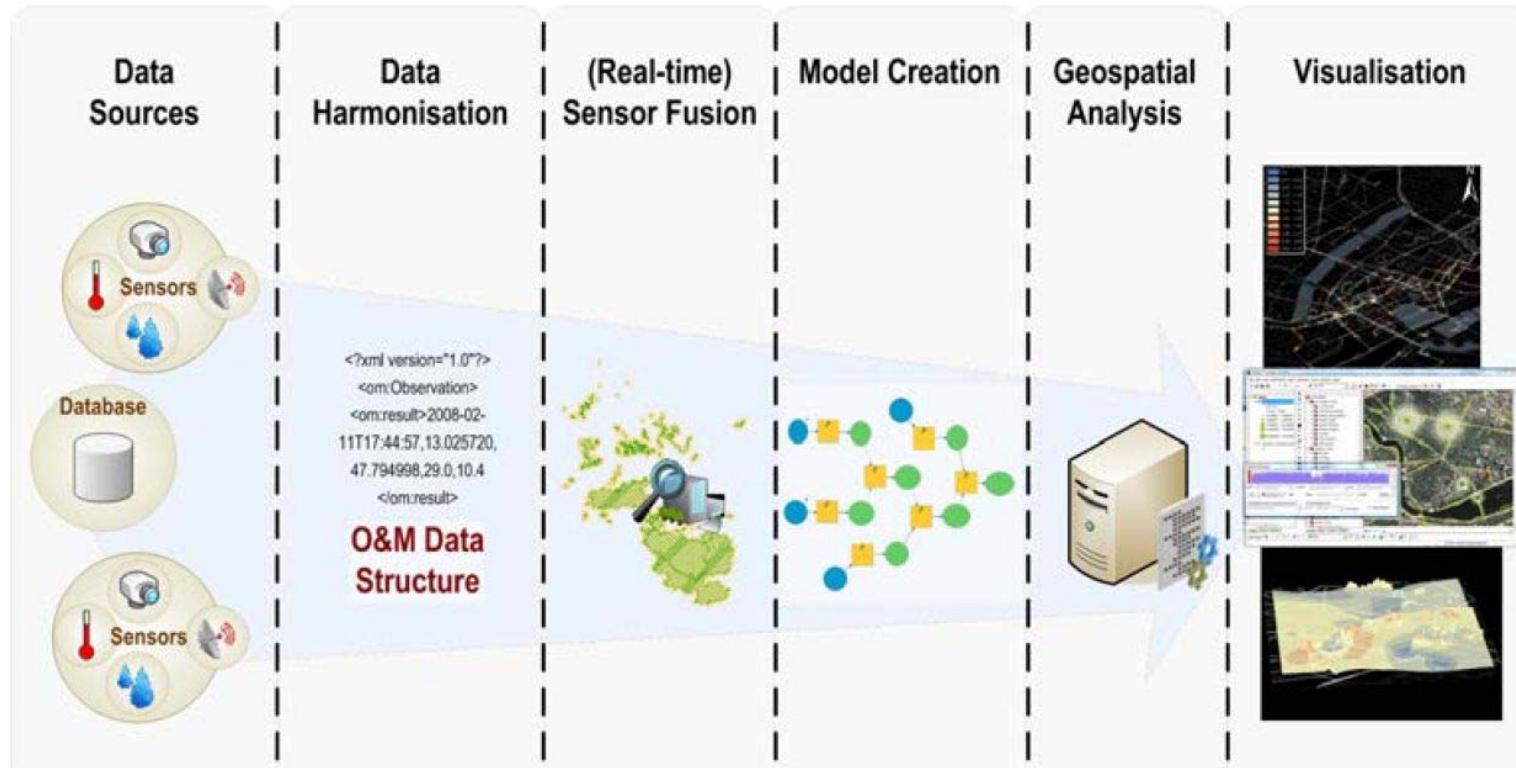
Four basic possibilities for ambient air monitoring:

- high quality and high time resolution measurements of air pollutants at fixed locations,
- mobile and flexibly installable monitoring devices (low power consumption, protective container...), relatively high quality data, or low cost sensors used very flexibly e.g. at lampposts or on buses,
- satellite observations of air pollutants and meteorology to derive information on parameters influencing urban air quality,
- modelling of the spatial and temporal variation of air pollutants in urban areas, using improved emissions inventories.



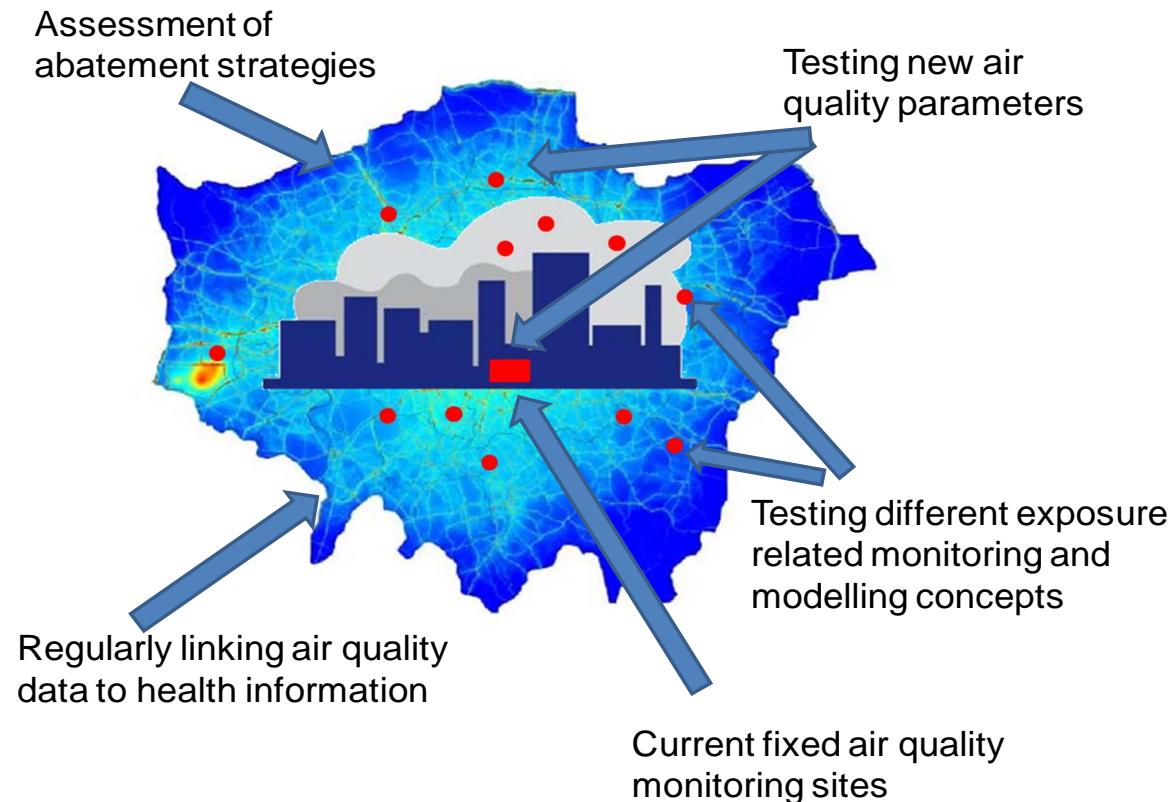
Air Pollution Monitoring Technologies
for Urban Areas

Monitoring



Health monitoring?

Establish a routine health monitoring? Routine time series studies? Multiple stressor environmental research platform?





Research Roadmap



Horizon 2020: What are the most important topics for urban air quality?

- Going beyond compliance monitoring?
- Development, quality needs and quality assessment of mobile multiparameter monitors and sensors for improved source and abatement strategy assessments?
- Urban AQ data integration tool for different types of monitoring approaches?
- Assessment of population exposure by dispersion and LUR modeling; linkage to routine health effect assessments?
- Set-up and development of Environment Research Platforms to investigate and develop....?
- Modeling and validation of spatial temporal variation of alternative metrics for urban areas?

These are some of the questions of today



AirMonTech Consortium: (from left) J. Moeltgen (UDE), U. Quass (IUTA), K. Torseth (NILU), K. Katsouyanni (NKUA), B. Vogel (UDE), R. Otjes (ECN), E. Weijers (ECN), P. Woods (NPL), T. Kuhlbusch (IUTA, Coordinator), P. Quincey (NPL), M. Viana (CSIC), R. Gehrig (EMPA), X. Querol(CSIC,) A. Borowiak (JRC), C. Hueglin (EMPA).