

**A WEB BASED MAPPING TOOL
FOR THE HARMONISED INTERCOMPARISON
OF AIR QUALITY MAPS**

Agnes Dudek, Robert Logna and Bruce Denby



**Norwegian Institute
for Air Research**

Background

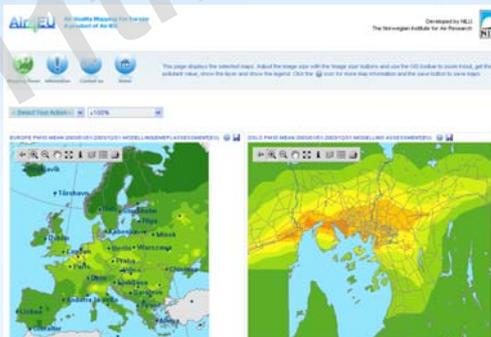
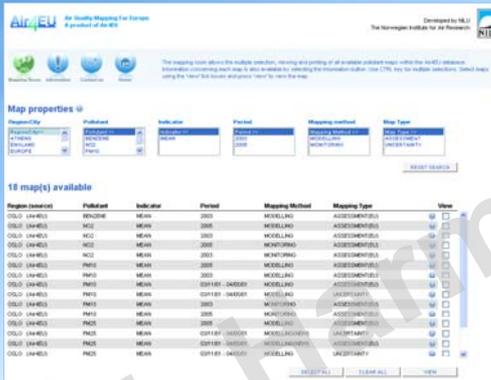


Air4EU has provided recommendations for improving air quality assessment in Europe.

A web based GIS tool was developed by the Norwegian Institute for Air Research (NILU).

Aim:

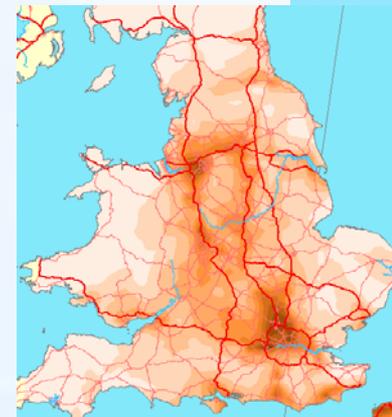
- Communicate Air4EU results
- Harmonises the dissemination of air quality maps
- Assessment and uncertainty maps
- Comparison of maps
- User group: experts and semi-experts



www.air4eumaps.info

Overview of the Air4EU mapping tool

- It allows maps on all scales to be displayed.
- Homogenous colour scaling and map projection.
- Easy intercomparison of maps.
- It contains examples of different methodologies.
- Assessment maps are accompanied by uncertainty maps.



Air4EU Mapping tool



Air Quality Mapping For Europe
A product of Air4EU

Developed by NILU
The Norwegian Institute for Air Research



Mapping Room



Information



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Air4EU Mapping Tool



The Air4EU air quality mapping tool allows maps of air quality to be shown for a wide variety of pollutants and all spatial scales using an interactive GIS system.

The maps available include case studies carried out within the European 6th framework project [Air4EU](#) as well as other contributed assessment maps.

Through this tool maps on all scales and from different regions can be selected, visualized and compared in a homogenous and interaction fashion.

**Go to the "Mapping Room" to select maps
or click on a city to select and view maps**

Selection tool



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Mapping Room



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The mapping room allows the multiple selection, viewing and printing of all available pollutant maps within the Air4EU database. Information concerning each map is also available by selecting the information button. Use CTRL key for multiple selections. Select maps using the 'view' tick boxes and press 'view' to view the map.

Map properties

Region/City

Region/City >>

- ATHENS
- ENGLAND
- EUROPE

Pollutant

Pollutant >>

- BENZENE
- NO2
- PM10

Indicator

Indicator >>

- MEAN

Period

Period >>

- 2003
- 2005

Mapping method

Mapping Method >>

- MODELLING
- MONITORING

Map Type

Map Type >>

- ASSESSMENT
- UNCERTAINTY

RESET SEARCH

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

SELECT ALL

CLEAR ALL

VIEW

Selection tool



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Mapping Room



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Region/City

Region/City>>

ATHENS

ENGLAND

EUROPE

Pollutant

Pollutant >>

BENZENE

0

Indicator

Indicator >>

MEAN

Period

Period >>

2003

2005

Mapping method

Mapping Method >>

MODELLING

MONITORING

Map Type

Map Type >>

ASSESSMENT

UNCERTAINTY

RESET SEARCH

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

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Map properties

Pollutant

Region/City

Region/City >>
ATHENS
ENGLAND
EUROPE

Pollutant >>

BENZENE
CO
NO2

Indicator

Indicator >>
MEAN

Period

Period >>
2003
2005

Mapping method

Mapping Method >>
MODELLING
MONITORING

Map Type

Map Type >>
ASSESSMENT
UNCERTAINTY

RESET SEARCH

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

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Map properties ?

Region/City

Region/City >>

- ATHENS
- ENGLAND
- EUROPE

Pollutant

Pollutant >>

- BENZENE
- NO2
- PM10

Indicator

Indicator >>

- AOT40
- DAILYMAX
- MAX8HRMEAN

Period

Period >>

- 2003
- 2005

Mapping method

Mapping Method >>

- MODELLING
- MONITORING

Map Type

Map Type >>

- ASSESSMENT
- UNCERTAINTY

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	🔍 <input type="checkbox"/>

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Map properties ?

Region/City

Region/City >>

- ATHENS
- ENGLAND
- EUROPE

Pollutant

Pollutant >>

- BENZENE
- NO2
- PM10

Indicator

Indicator >>

- MEAN

Period

Period >>

- 2000
- 2001
- 2002

Mapping method

Mapping Method >>

- MODELLING
- MONITORING

Map Type

Map Type >>

- ASSESSMENT
- UNCERTAINTY

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	🔍 <input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	🔍 <input type="checkbox"/>

Selection tool



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Map properties

Region/City

Region/City >>

- ATHENS
- ENGLAND
- EUROPE

Pollutant

Pollutant >>

- BENZENE
- NO2
- PM10

Indicator

Indicator >>

- MEAN

Period

Period >>

- 2003
- 2005

Mapping method

Mapping Method >>

- ASSIMILATION
- MODELLING
- MONITORING

Mapping Type

Mapping Type >>

- ASSESSMENT
- UNCERTAINTY

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

Selection tool

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Map properties

Region/City: ATHENS, ENGLAND, EUROPE

Pollutant: BENZENE, NO2, PM10

Indicator: MEAN

Period: 2003, 2005

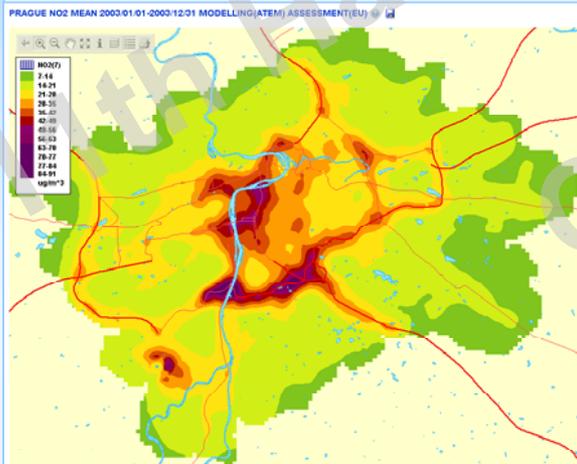
Mapping method

Mapping Method >>
ASSIMILATION
MODELLING
MONITORING

Map Type: ASSESSMENT, CERTAINTY

RESET SEARCH

Modelling



Monitoring

PRAGUE PM10 MEAN 2003 01 01 - 2003 12 31 MONITORING ASSESSMENT (EU)

Map Type: ASSESSMENT (EU), CERTAINTY

CLEAR ALL VIEW

Selection tool



Mapping Room



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Map properties

Region/City

Region/City >>

- ATHENS
- ENGLAND
- EUROPE

Pollutant

Pollutant >>

- BENZENE
- NO2
- PM10

Indicator

Indicator >>

- MEAN

Period

Period >>

- 2003
- 2005

Mapping method

Mapping Method >>

- MODELLING
- MONITORING

Map Type

Map Type >>

- ASSESSMENT
- UNCERTAINTY

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

SELECT ALL

CLEAR ALL

VIEW

Selection tool



Other maps for OSLO: OSLO BENZENE MEAN 2003/01/01-2003/12/31 MODELLING ASSESSMENT(EU) ▼

The map presented here shows the annual mean concentration of benzene in Oslo for the year 2003. The map represents the urban background concentrations, as calculated with the Eulerian part of the AirQUIS-EPISODE dispersion model, at 1 km resolution (<http://www.airquis.no>). Emission data includes traffic exhaust and industrial sources. No rural background concentrations are used. Meteorology is calculated using a diagnostic wind field model based on a centrally located meteorological mast. The uncertainty in the calculated field can be seen in. More information concerning this map can be found in the report 'Rikets Miljøtilstand 2003' (Norwegian only) at <http://www.nilu.no/data/inc/leverfil.cfm?id=10969&type=6>

[View technical details](#)

Close Window Preview Map Print Document

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Map information

Mapping method

Mapping Method >>
MODELLING
MONITORING

Map Type

Map Type >>
ASSESSMENT
UNCERTAINTY

RESET SEARCH

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM10	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	
OSLO (Air4EU)	PM10	MEAN	2003	MONITORING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM10	MEAN	2005	MONITORING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM25	MEAN	2005	MODELLING	ASSESSMENT(EU)	
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	UNCERTAINTY	
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEW)	ASSESSMENT(EU)	
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	

SELECT ALL

CLEAR ALL

VIEW

Selection tool



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Map properties

Region/City

Region/City >>
ATHENS
ENGLAND
EUROPE

Pollutant

Pollutant >>
BENZENE
NO2
PM10

Indicator

Indicator >>
MEAN

Period

Period >>
2003
2005

Mapping method

Mapping Method >>
MODELLING
MONITORING

Map Type

Map Type >>
ASSESSMENT
UNCERTAINTY

RESET SEARCH

18 map(s) available

Region (source)	Pollutant	Indicator	Period	Mapping Method	Mapping Type	View
OSLO (Air4EU)	BENZENE	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2005	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	NO2	MEAN	2003	MONITORING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input checked="" type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2005	MODELLING	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM10	MEAN	2003	MODELLING	UNCERTAINTY	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING(NEV)	ASSESSMENT(EU)	<input type="checkbox"/>
OSLO (Air4EU)	PM25	MEAN	03/11/01 - 04/05/01	MODELLING	UNCERTAINTY	<input type="checkbox"/>

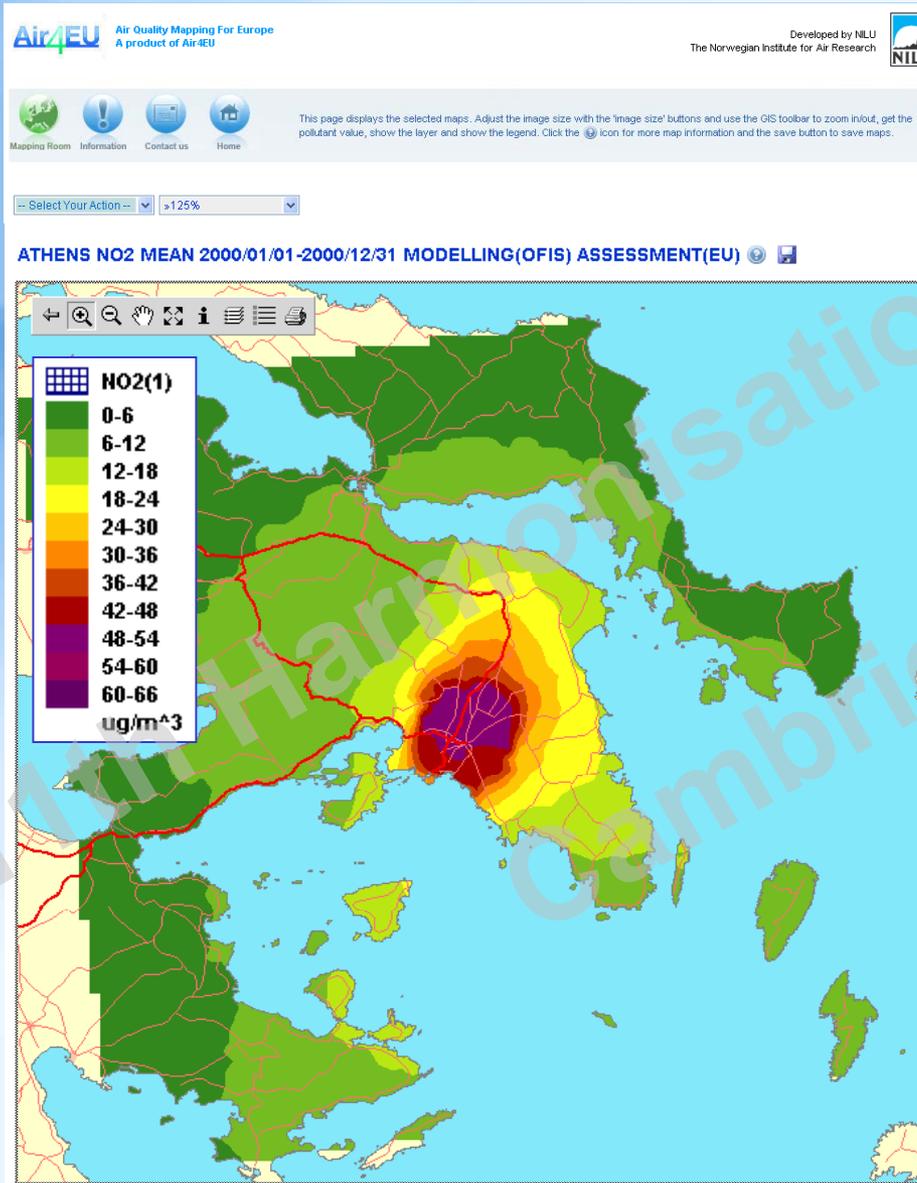
The user can select one or several maps

SELECT ALL

CLEAR ALL

VIEW

Single map display

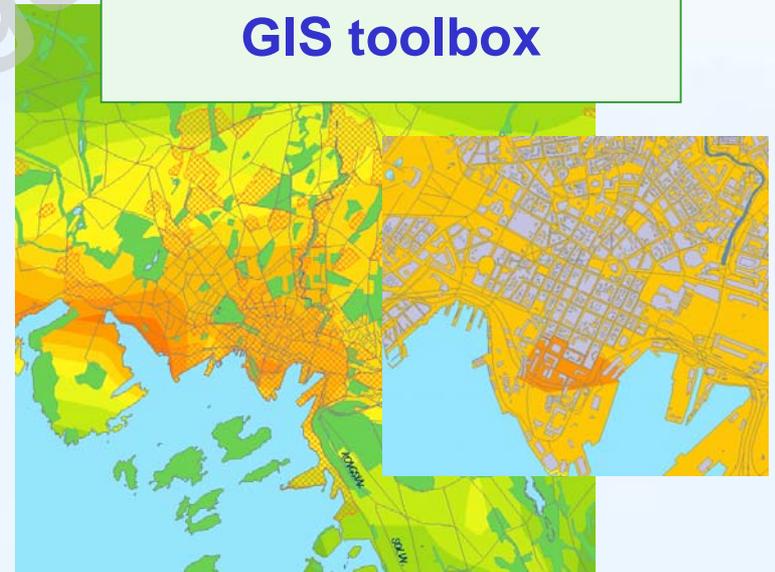


Map title with map properties

Map information

Save and print maps

GIS toolbox



Multiple map display

Air4EU Air Quality Mapping For Europe
A product of Air4EU

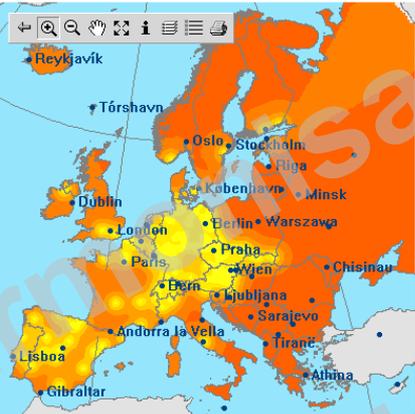
Developed by NILU
The Norwegian Institute for Air Research

Mapping Room Information Contact us Home

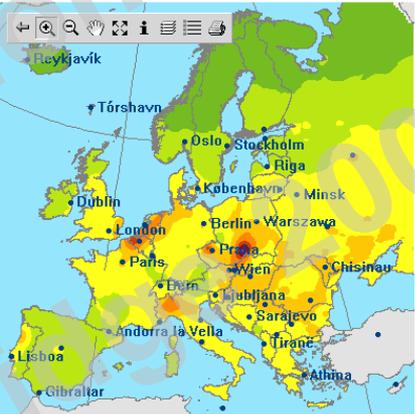
This page displays the selected maps. Adjust the image size with the 'image size' buttons and use the GIS toolbar to zoom in/out, get the pollutant value, show the layer and show the legend. Click the  icon for more map information and the save button to save maps.

Select Your Action -- x125%

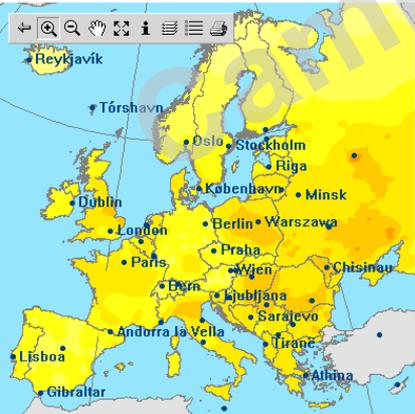
EUROPE PM10 MEAN 2003/01/01-2003/12/31 MONITORING(KRIGING) UNCERTAINTY



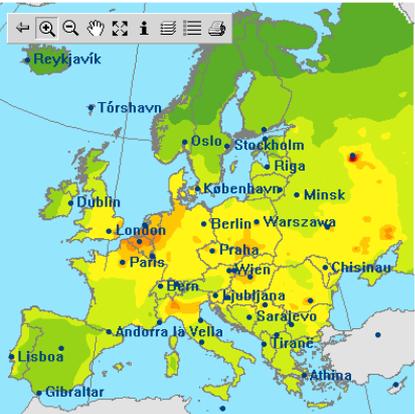
EUROPE PM10 MEAN 2003/01/01-2003/12/31 ASSIMILATION(BAYESIAN) ASSESSMENT (EU)



EUROPE PM10 MEAN 2003/01/01-2003/12/31 ASSIMILATION(BAYESIAN) UNCERTAINTY



EUROPE PM10 MEAN 2003/01/01-2003/12/31 ASSIMILATION(REGRESSION) ASSESSMENT(EU)

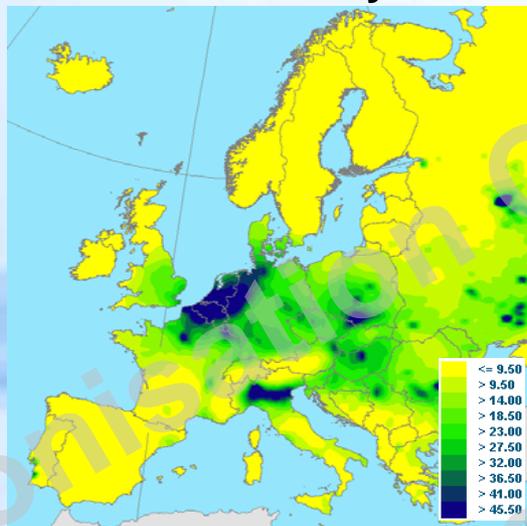
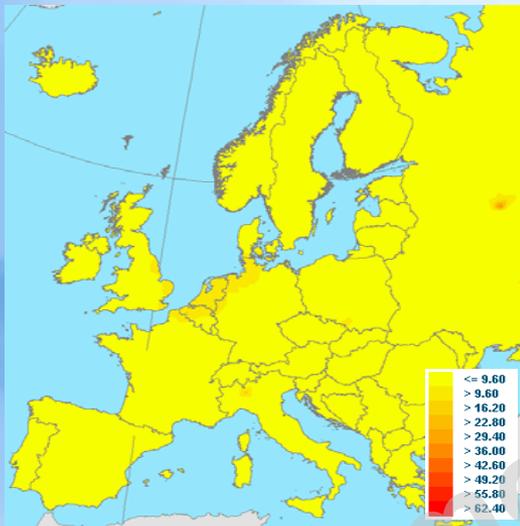


Exceedance of PM_{10} daily mean limit value of $50 \mu\text{g}/\text{m}^3$ for Europe (2003)

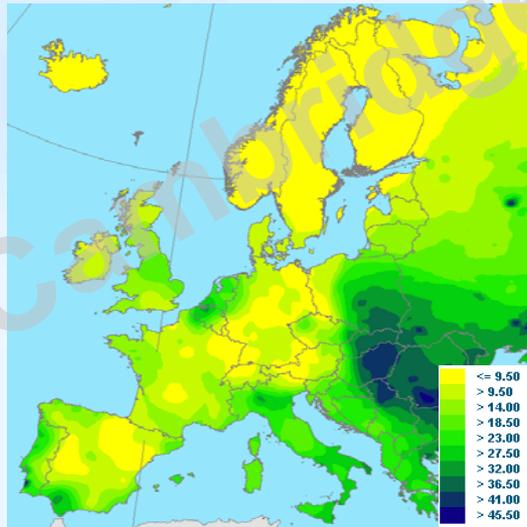
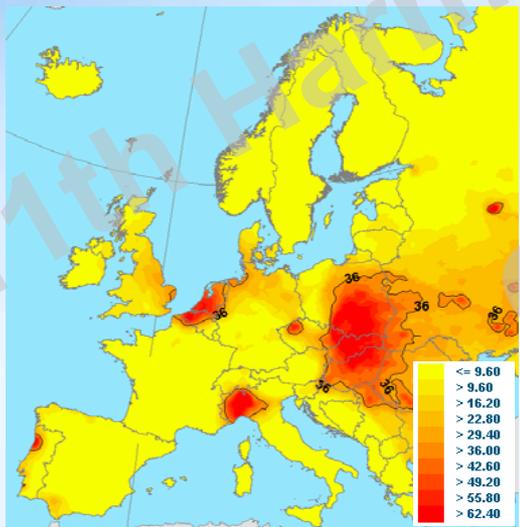
Assessment

Uncertainty

Model (EMEP)



Assimilation (Kriging)



Basic data assimilation methods were tested for combining Unified EMEP model with Airbase monitoring data for PM_{10} .

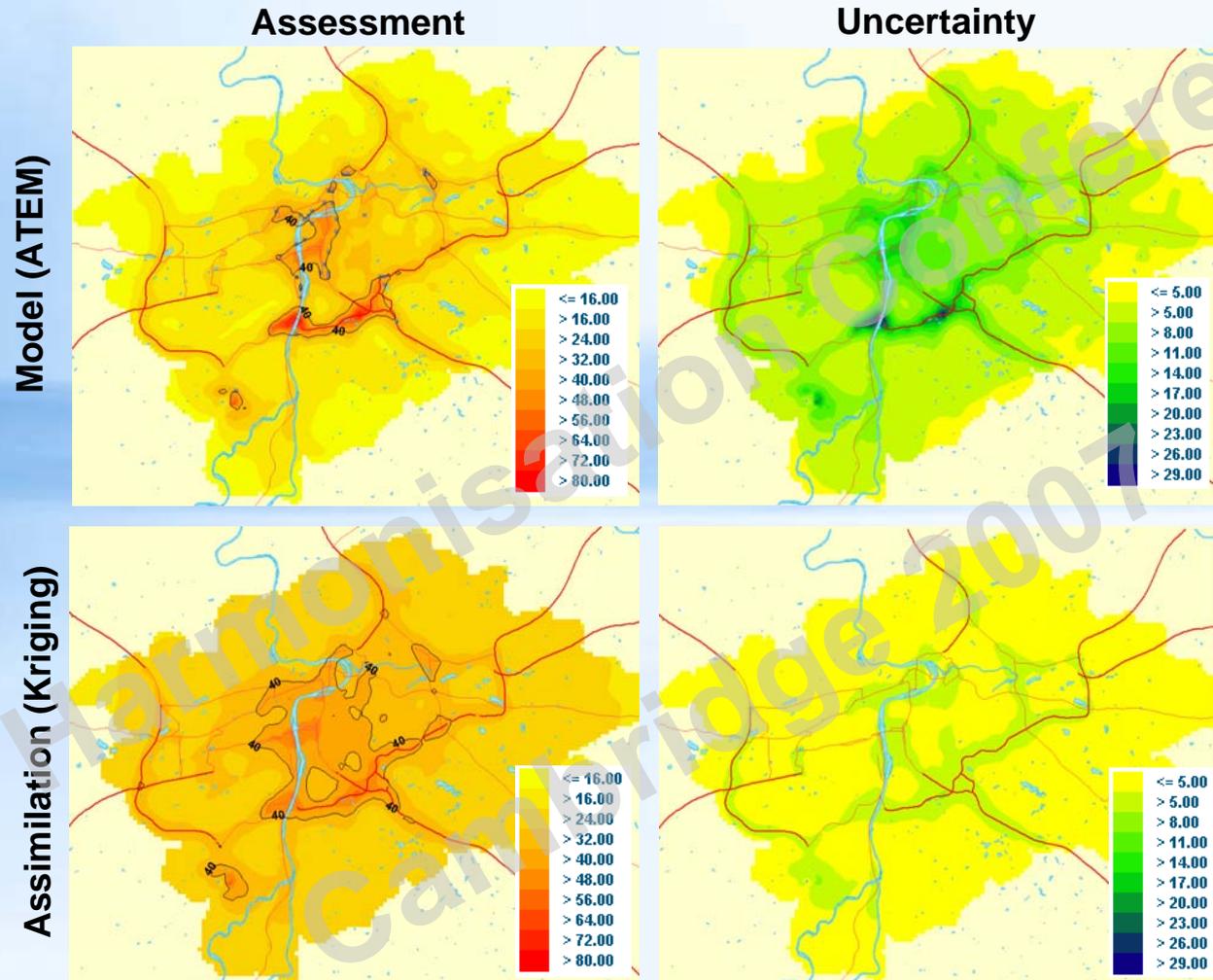
EMEP model underestimates PM_{10} concentrations.

The assimilation map is constructed by residual kriging after linear regression of the model.

Uncertainty maps show areas of high uncertainty (over 40 days).

Uncertainty is reduced where measurements are available.

Exceedance of NO₂ annual mean in Prague (2003)



Basic data assimilation methods were tested using monitoring data from 12 sites in the urban area of Prague and NO₂ annual mean concentrations calculated by ATEM model.

The use of assimilation increases the region exceeding 40 $\mu\text{g}/\text{m}^3$ but reduces uncertainty.

Conclusions

The tool improves and harmonises the dissemination of mapping information for both authorities and institution involved in air quality assessment.

Air4EU mapping tool encourages the production of uncertainty maps associated with them.

Conclusions

The tool provides centralised and ordered access for a mapping database.

The tool can be used to aid dissemination of mapping information for both city users and institutes involved in air quality assessment.

It is possible to add new maps to the mapping tool database. These data can be delivered in standard GIS formats.

Acknowledgments

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The screenshot shows the 'Air4EU Mapping Tool' interface. At the top, it says 'Air4EU Air Quality Mapping For Europe A product of AIR-REU'. Below this are navigation icons for 'Mapping Room', 'Information', 'Contact us', and 'Home'. The main content area features a map of Europe with several cities marked: Bergen, Stavanger, Oslo, Drammen, London, Rotterdam, Prague, Paris, Rome, and Athens. To the right of the map, there is a text box that reads: 'The Air4EU air quality mapping tool allows be shown for a wide variety of pollutants a using an interactive GIS system. The maps available include case studies c European 6th framework project AIR4EU a contributed assessment maps. Through this tool maps on all scales and f can be selected, visualized and compared and interaction fashion.' Below this text is a blue button that says 'Go to the "Mapping Room" to select maps or click on a city to select and view maps'. The interface also includes several inset maps: a topographic map of Europe, a detailed urban map of a city, and a map of Europe with a green-to-yellow color scale.