

## NCSR Demokritos: Observation platforms – solution for city scale AQ data & management

















**ATHENS GAW/ACTRIS STATION** 2007-2017



**Elemental** and Organic Carbon

Mass Concentration of PM<sub>2.5 &</sub> PM<sub>10</sub>

METRO SYSTEMS

Size distribution of fine and ultrafine particles

**Atmospheric** parameters with impact on climate and human exposure

> **Hygroscopicity** and Volatility of **Ultrafine** particles



Light scattering & absorption



Trace metals, major ions and source micromarkers







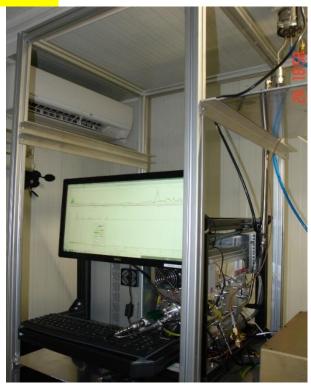






## Solution for city scale AQ is implemented with Low-cost air quality sensor network and supersites.

ACSM-ToF for showcase NRT source apportionment



- Online data (near real time) from spatially distributed low cost sensor systems/pilot networks NCSR In-situ monitoring network using online air quality sensors (gaseous pollutants, PM and BC)
- On-Line NRT data from selected "high end" infrastructures
- Athens Network setup still pending according to SMURBS needs;
- representative of population outdoor exposure conditions.

Obtained data will be cross-validated with data from campaigns, other sites (Thissio supersite) and from the regulatory monitoring network in operation in Athens.











## Comparison experiment of low cost sensors for aerosol and gasses at DEM Athens



## IAC, 2018, St Louis, USA

