

Dust Events in Cyprus

Dr Chrysanthos Savvides
Head of Air Quality Section
Department of Labour Inspection

COST Meeting – Air Quality
Rome 11-12/3/2019

<http://www.airquality.gov.cy>

Legislation – Limit values

The Ambient Air Quality Law 2010 (Law 77(I)/2010), accompanied by Regulations 111/2007 and 327/2010 harmonize the Cyprus Legal Framework with the European Directive 2008/50/EC on ambient air quality and cleaner air for Europe.

Daily limit value of PM_{10} : **$50 \mu g/m^3$**

Yearly limit value of PM_{10} : **$40 \mu g/m^3$**

Permitted exceedances per year: **35**

Network – Public Information



Cyprus Air Quality monitoring stations

Traffic Stations



Cyprus Air Quality monitoring stations

Industrial Stations



Cyprus Air Quality monitoring stations

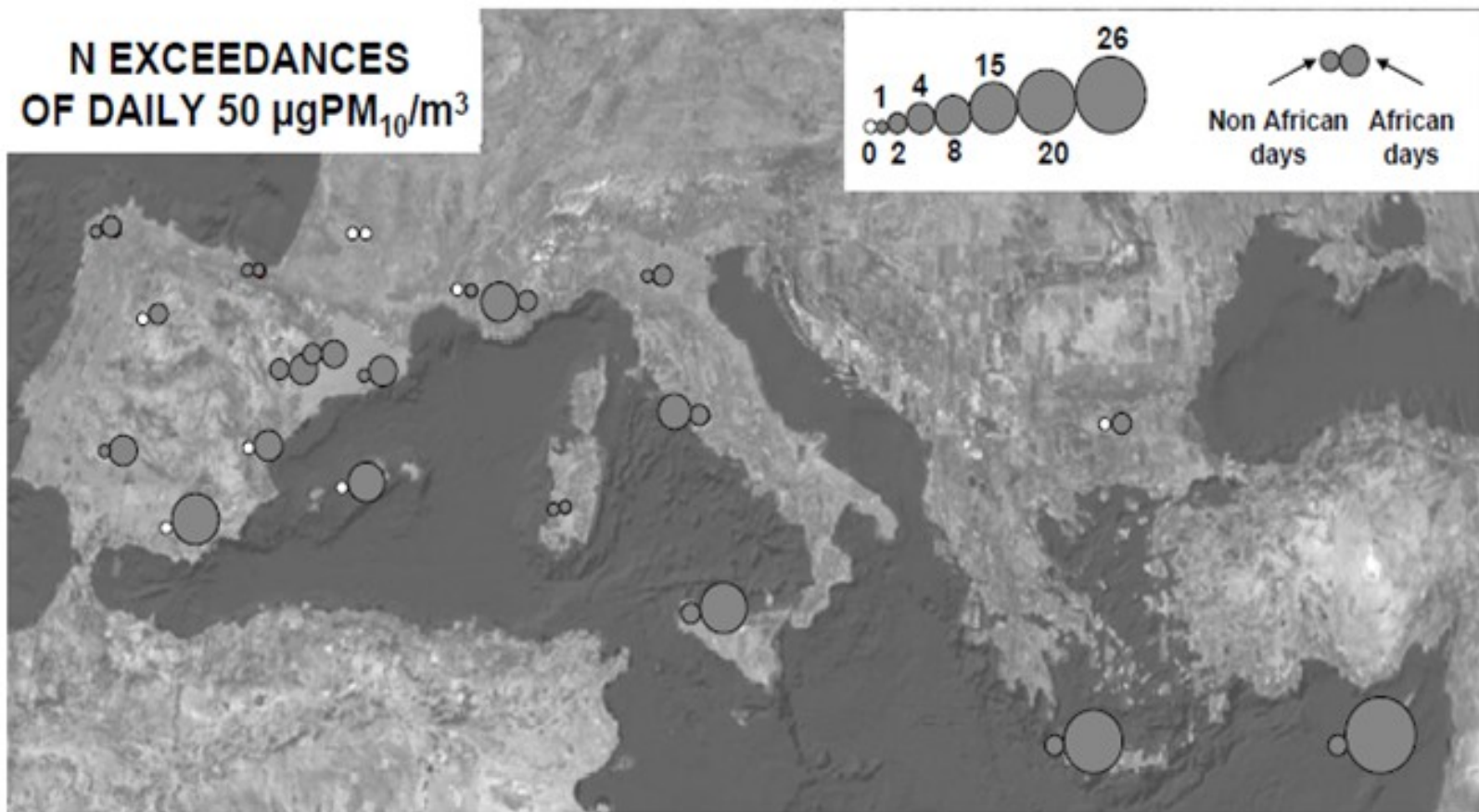
Background Station



Brussels, 15.02.2011
SEC(2011) 208 final

COMMISSION STAFF WORKING PAPER

establishing guidelines for demonstration and subtraction of exceedances attributable to natural sources under the Directive 2008/50/EC on ambient air quality and cleaner air for Europe

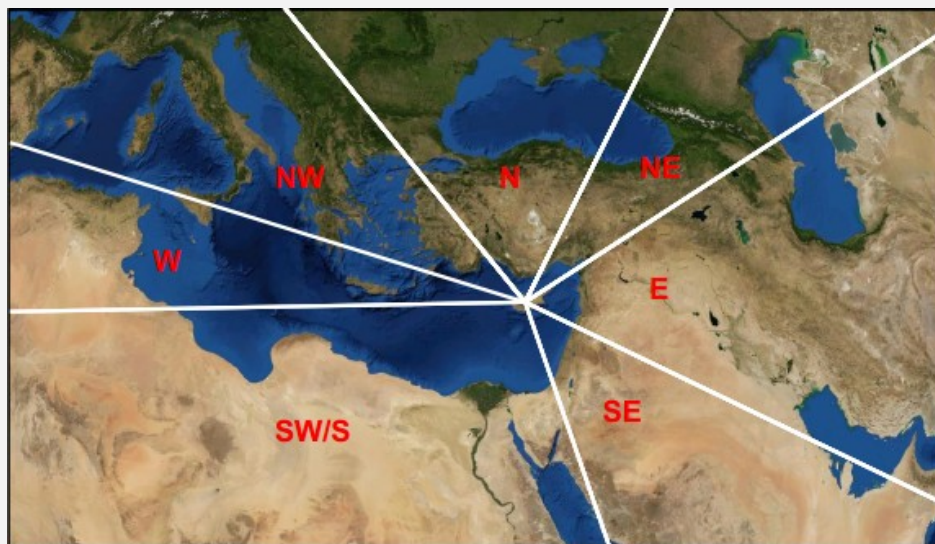


Source apportionment

The rationale behind the possibility to subtract natural contributions is provided by Recital 15 of Directive 2008/50/EC: **'Contributions from natural sources can be assessed but cannot be controlled. Therefore, where natural contributions to pollutants in ambient air can be determined with sufficient certainty, and where exceedances are due in whole or in part to these natural contributions, these may, under the conditions laid down in this Directive, be subtracted when assessing compliance with air quality limit values.'**

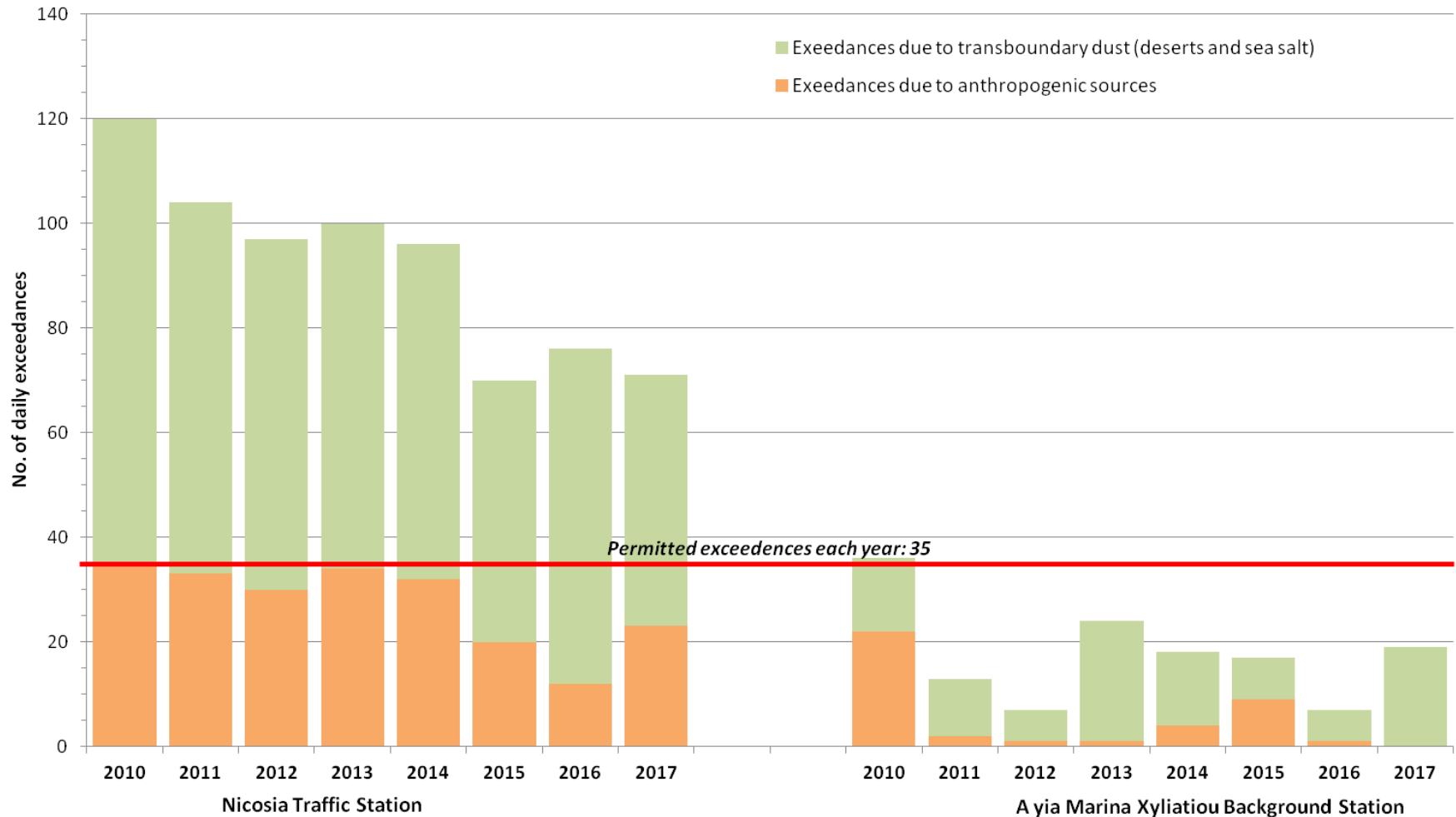
Chemical analysis of the filters from Nicosia Traffic and Ayia Marina Xyliatou Background station (EMEP).

Methodology is basing on «Guidelines for demonstration and subtraction of exceedances attributable to natural sources under the Directive 2008/50/EC on ambient air quality and cleaner air for Europe”.



Regions of origin of PM10 depending on the direction of the wind

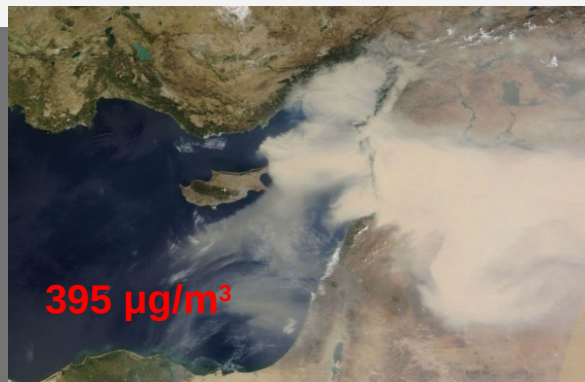
Number of daily PM₁₀ exceedances over the daily limit value (50 µg/m³) for the period 2010-2017



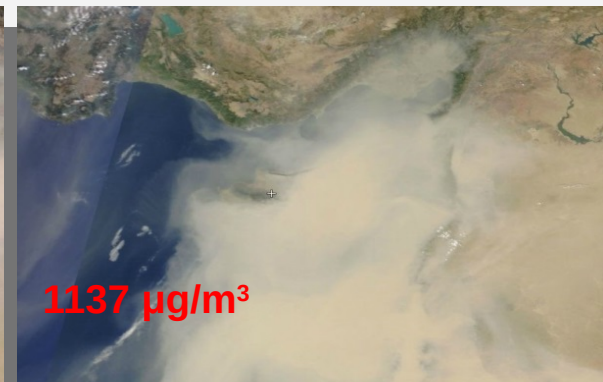
Dust Episode September 2015



6/9/2015



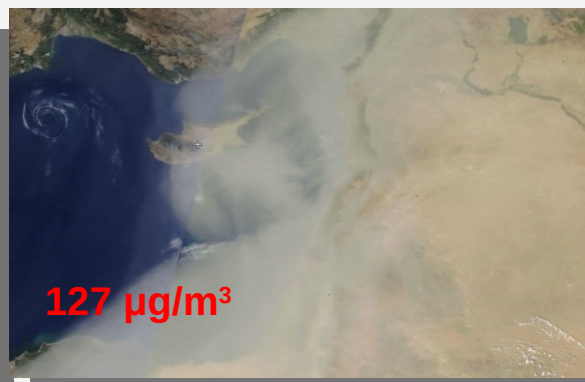
7/9/2015



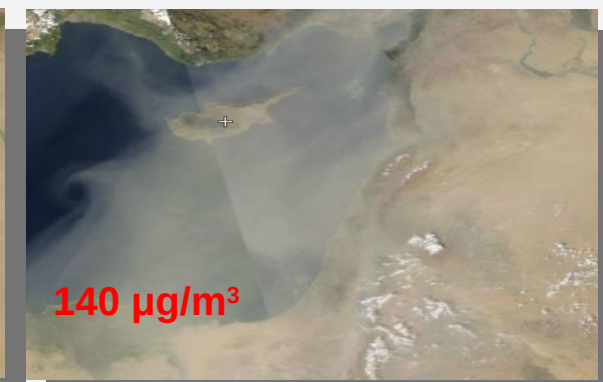
8/9/2015



9/9/2015



10/9/2015



11/9/2015

Dust announcement procedure

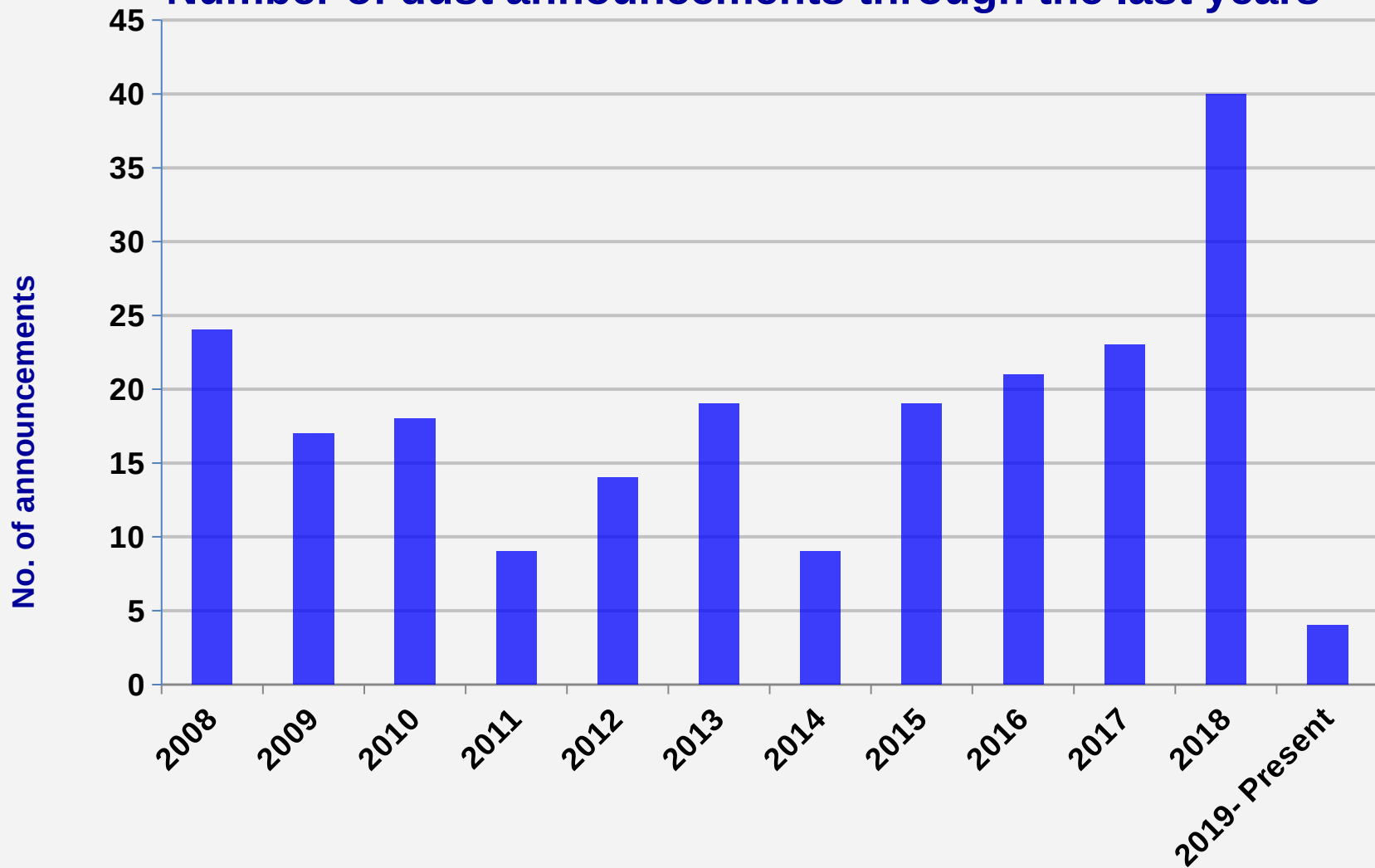
The criteria for notifying the public in case of a dust episode are:

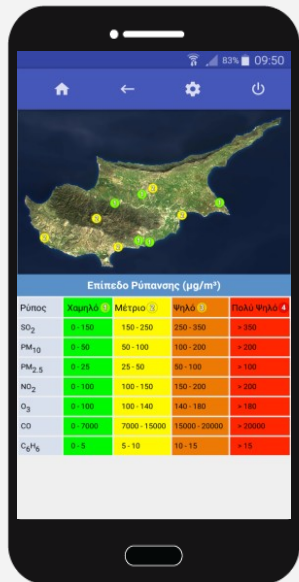
- Criterion 1: The pollution level in at least 1 station is "high"
(concentration PM_{10} 100-200 $\mu\text{g}/\text{m}^3$)
- Criterion 2: The pollution level in at least 3 stations is "moderate"
(concentration PM_{10} 50-100 $\mu\text{g}/\text{m}^3$)
- Criterion 3: The pollution level at the Background station is "moderate"
(concentration PM_{10} 50-100 $\mu\text{g}/\text{m}^3$)

Dust announcement is issued when 2 of 3 following criteria are met

Pollution Level ($\mu\text{g}/\text{m}^3$)	Low 0 – 50	Moderate 50 – 100	High 100 – 200	Very High > 200
---	---------------	----------------------	-------------------	--------------------

Number of dust announcements through the last years





Mobile App “Air Quality Cyprus”



<http://www.airquality.gov.cy>



Thank you for your attention

Tel: +357 22 405640

Email: csavvides@dli.mlsi.gov.cy