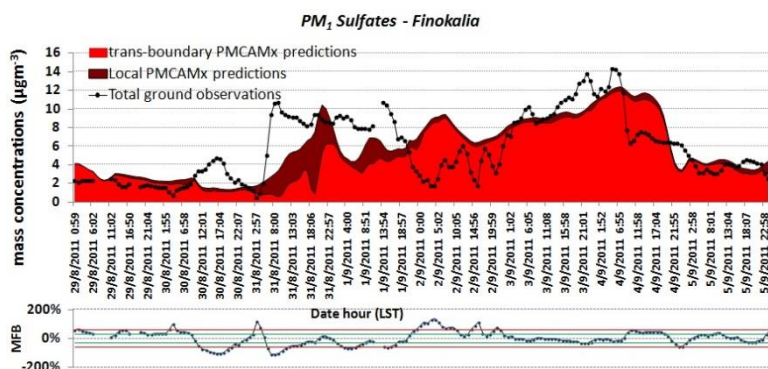


Εικόνα 1: Daily average PM1 concentration fields ( $\mu\text{gm}^{-3}$ ) of sulfate, during NW winds (31 August 2011), blowing over the Aegean Sea. Iso-lines show the contribution of trans-boundary sources to the total aerosol mass.

Γεγονός: The spatial distribution of daily mean sulfate concentrations over Greece is given for 31 August 2011, when the observed winds at Crete change to NW. The concentration map of this episode indicates that the air parcels passing over continental Greece (Athens and Peloponnese) head towards the south Aegean Sea (Εικόνα 1). During that day, the submicron sulfate over the south AS (Finokalia) is equally shaped by the local (domain-wide) and by the exogenous sources, with

80% of the former originating from the Greek territory. The peak values ( $10 \mu\text{gm}^{-3}$ ) at Finokalia observed during the sulfur transport from

Greek power plants towards the south AS are shown in Εικόνα 2 (πηγή: <https://www.atmos-chem-phys.net/13/11595/2013/>)



Εικόνα 2: Comparison of PMCAMx (total shaded area) with hourly measurements (black dotted line) of total PM1 sulfate concentrations ( $\mu\text{gm}^{-3}$ ) over Finokalia during 31 August–09 September 2011.

Χρήσιμα links (NOAA/ARL READY)

<https://ready.arl.noaa.gov/index.php>

<https://ready.arl.noaa.gov/HYSPLIT.php>

<https://ready.arl.noaa.gov/hypub-bin/dispasrc.pl>

<https://ready.arl.noaa.gov/hypub-bin/trajtype.pl?runtype=archive>

Θέση πηγής:



1. Υπολογίστε την εξέλιξη της διασποράς του θυσάνου κατά την ημέρα του επεισοδίου

2. Υπολογίστε την πισθοτροχιά των αέριων μαζών που βρίσκονται στην Α. Κρήτη ( $35^{\circ} 20' N$ ,  $25^{\circ} 40' E$ ) την ίδια ημέρα.