



Simultaneous advection of volcanic ash and desert dust in Naples Mediterranean area

Salvatore Spinoso,

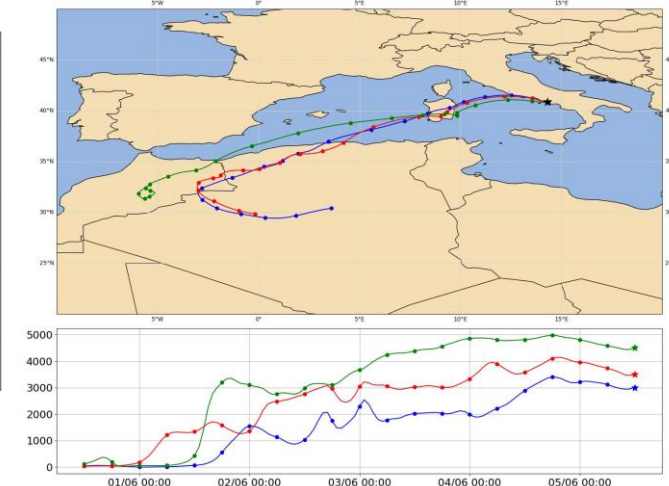
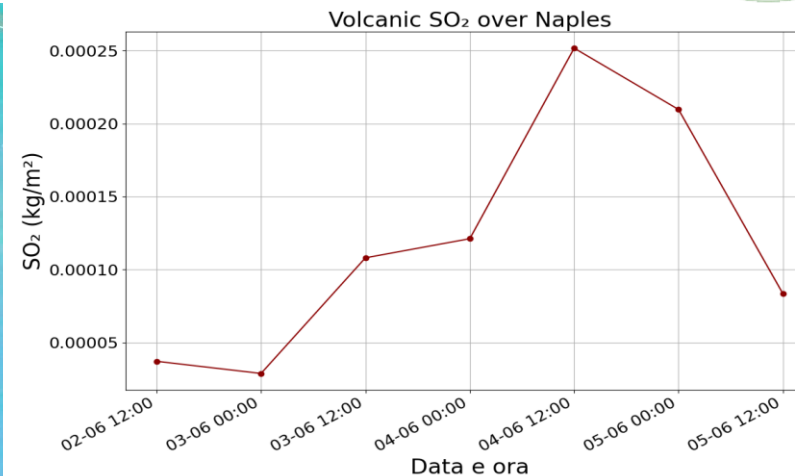
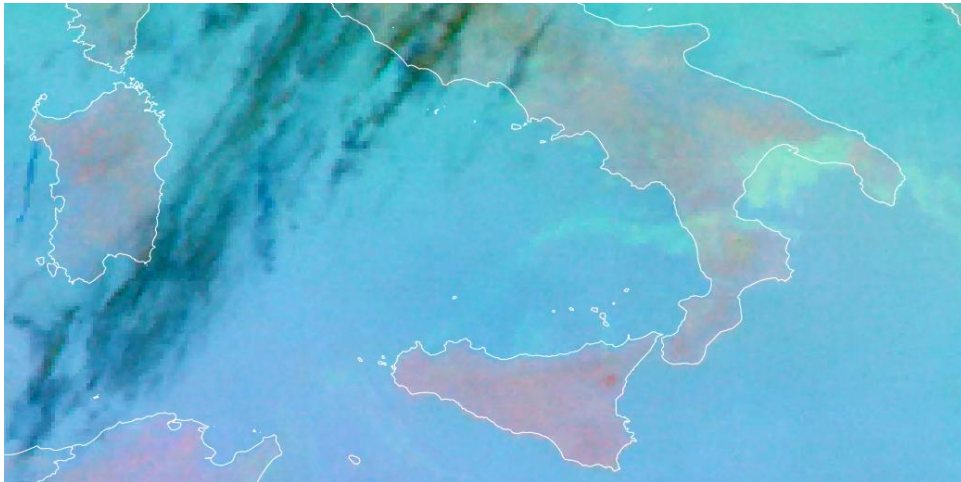
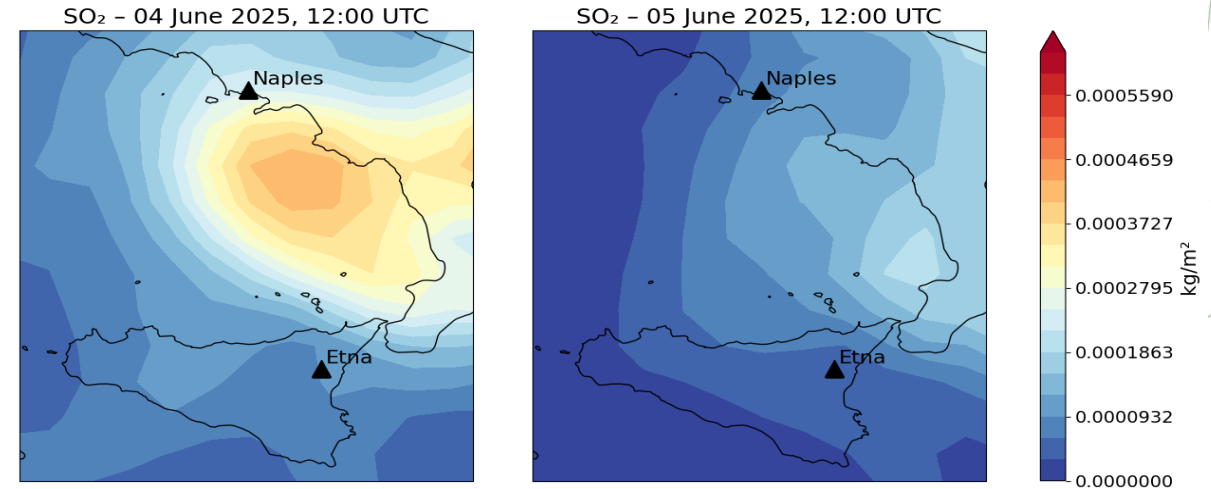
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(D.D. n. 130/2022 - CUP B53C22002150006) Funded by EU - Next Generation EU PNRR-
Mission 4 "Education and Research" - Component 2: "From research to business" - Investment
3.1: "Fund for the realisation of an integrated system of research and innovation infrastructures"



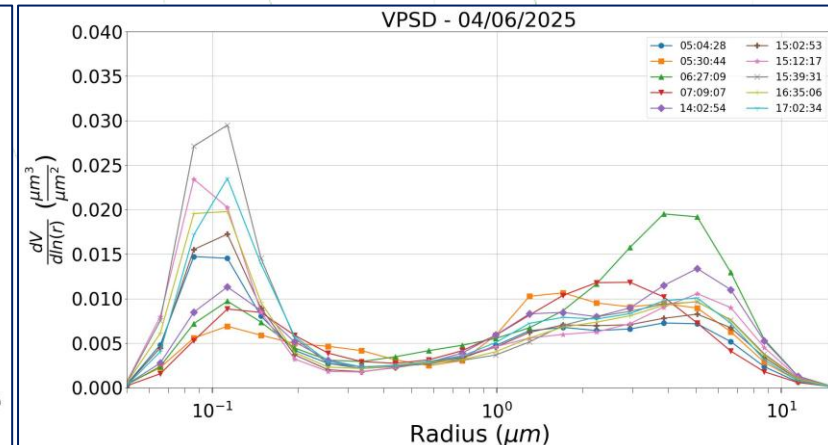
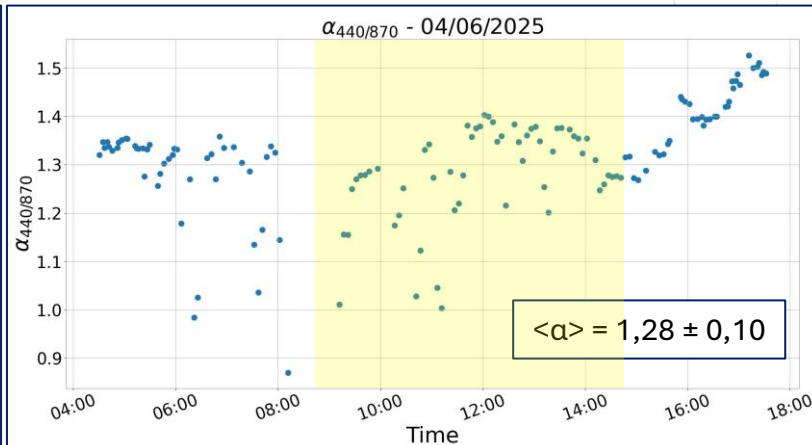
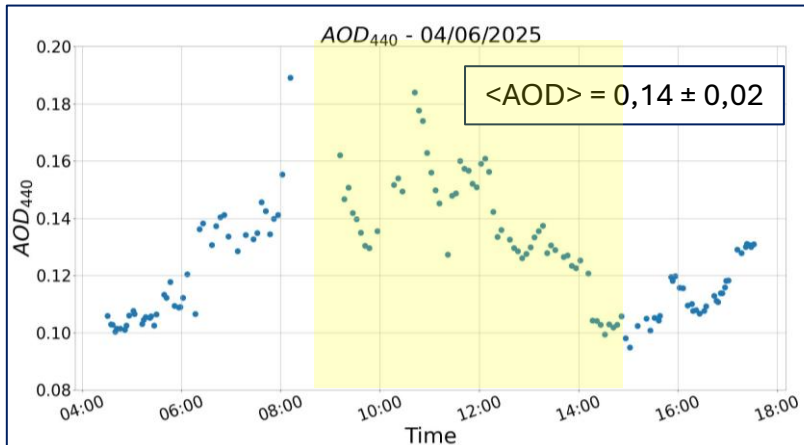
Copernicus Satellite Data and HYSPLIT Model

- On June 2, a volcanic eruption occurred at Mount Etna.
- On June 4, the volcanic plume reached the Naples National Facilities.
- On June 5, Saharan dust arrived over Naples, ranging between 3 and 5 km in altitude.

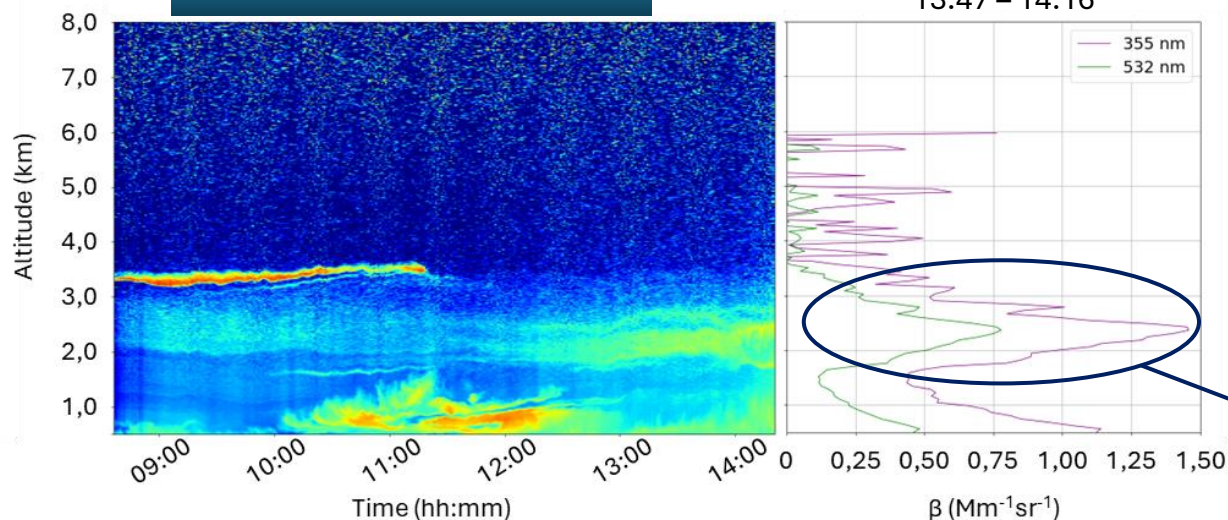


04/06/2025 – PHOTOMETER & LIDAR DATA

Photometer



Lidar

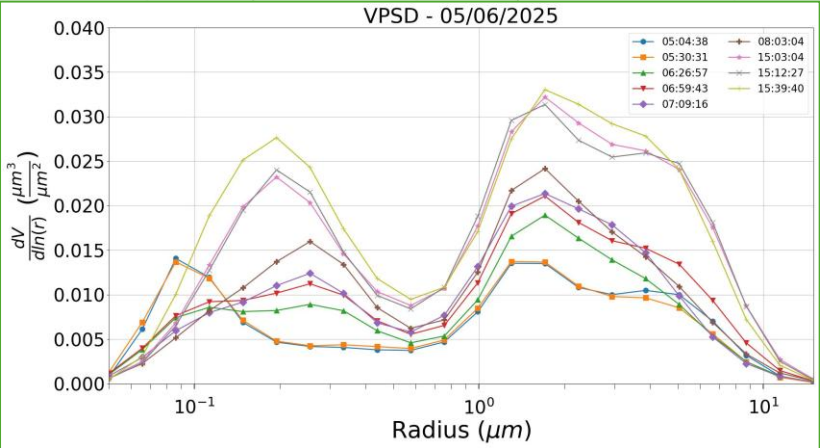
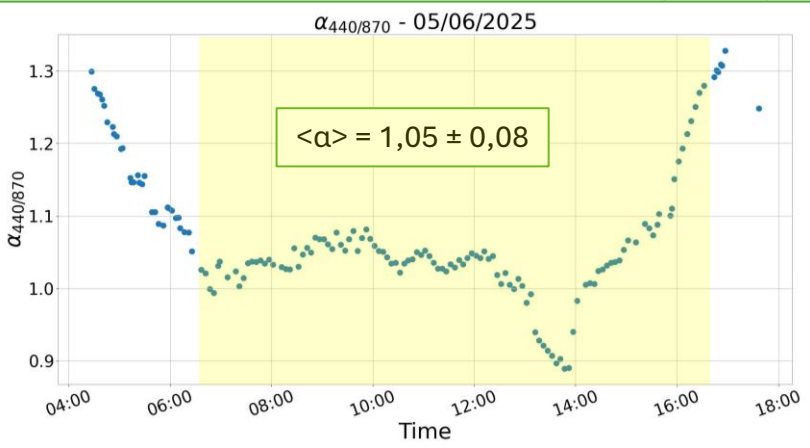
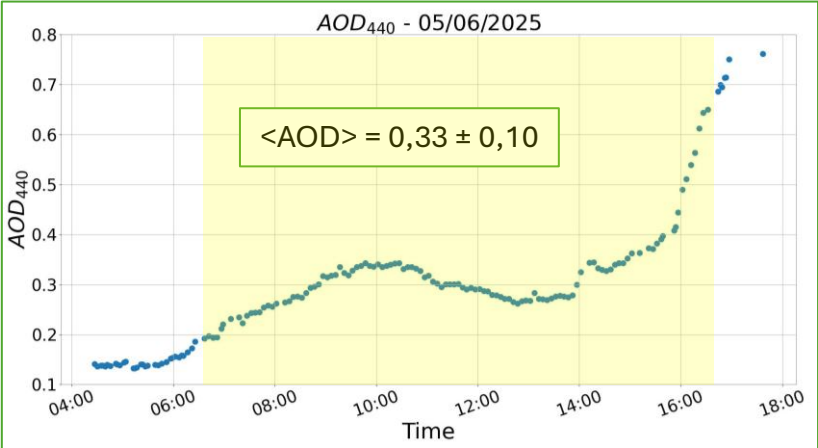


BAE = $1,67 \pm 0,15$

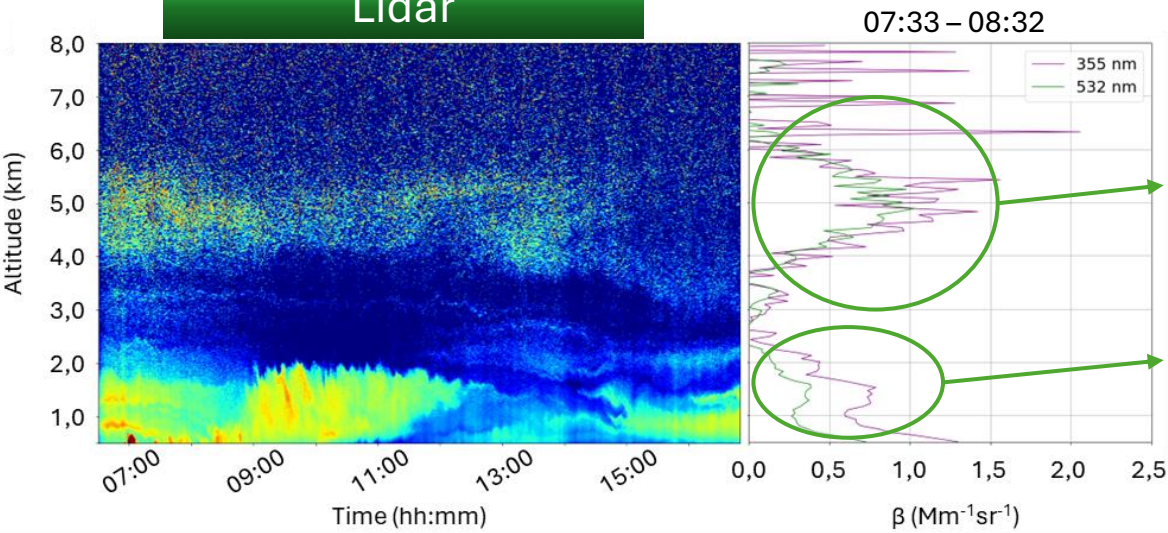
	Volcanic Layer
Range (km)	1,6 – 3,6
Lidar Ratio	67 ± 20
Linear Depolarization (%) 532 nm	$5,1 \pm 1,4$

05/06/2025 – PHOTOMETER & LIDAR DATA

Photometer



Lidar



BAE = 0.54 ± 0.35

BAE = 1.82 ± 0.05

	Volcanic Layer	Saharan Dust
Range (km)	0,3 – 1,7	2,7 – 7,4
Lidar Ratio	67 ± 20	47 ± 15
Linear Depolarization (%) 532 nm	6.4 ± 2.3	10.4 ± 8.9



THANKS!

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