



Variation in tropospheric Ozone (O₃) maximum daily value in a North-South gradient in the Iberian Peninsula

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Global analyses have shown a very clear spatial gradient of tropospheric Ozone (O₃) maximum mean values across Europe, with maximum values to the North during April-May, and summer maximum to the south.

The same gradient at gross scale is shown in the Iberian Peninsula, and in this poster we present a more detailed analysis by using daily calendar along a North-South climate gradient.

O₃ is a secondary pollutant whose concentration is highly dependent on temperature and solar radiation (which vary greatly along the North-South gradient), NOX emissions and the concentration of Volatile Organic Compounds (VOC) (which are associated to anthropogenic activity).

Daily calendars were computed for the regions of Cantabria, Biscay, Zaragoza and Seville from 2000 to 2010 and monthly maximum values were identified. Cantabria and Biscay represent northern areas; Zaragoza mid-inland, and Sevilla southern areas.

The results show that the North-South continental gradient can also be appreciated along the 1000 km distance that separates the more Northern cities (Cantabria, Biscay) and the more Southern ones (Seville), with maximum values appearing in April-May in the first case, and during the summer in the second.