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## SEASONAL TREND OF NITROGEN DIOXIDE LEVELS MEASURED BY MEANS OF PASSIVE SAMPLERS IN 'LA PLANA DE CASTELLON' (SPAIN)

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The aim of this work is the study of seasonal trends of NO2 levels in a Mediterranean Spanish coastal area. Measurement campaigns were made in summer 2001 and winter 2002. Fourteen samples were collected each sampling period covering an interest area of 1,400 km2. Measurements were made with Radiello® passive samplers. Highly different levels of NO2 were recorded in rural areas compared with roads and cities. In summer, the highest levels were recorded in roads; meanwhile in wintertime highest levels were recorded in Castellon city center. NO2 levels in rural area were all below 10 µg/m3. In roads, levels were between 30-50 µg/m3 in summer and 50-75 µg/m3 in winter. In urban environments, NO2 levels were in the range 20-40 µg/m3 during summer and between 60-90 µg/m3 in winter. All these values registered were in consonance with those reported in the literature. Beside this, a seasonal trend was established with increasing values of NO2 in winter season. As well, NO2 levels recorded in sites situated in the ceramic area were clearly related with the economic activity of the tile and glaze factories. Finally, the Benicassim site was of interest due to NO2 levels recorded reflects undoubtedly the tourist pattern of the area as NO2 levels descend sharply from summer to winter correlated with the high decrease in the population of this city. Acknowledgements Authors are grateful to the Ministerio-Ciencia-Tecnologia for financial support throws the REN2002-04337-C02-01/CLI project. JM Delgado is grateful to the Generalitat-Valenciana for the FPI grant.