



European Geophysical Society

EUROPEAN
GEOPHYSICAL
SOCIETY

Annales Geophysicae

Part II
Hydrology, Oceans & Atmosphere

Supplement II to Volume 16

**MULTIVARIATE MODEL ESTIMATION USING METEOROLOGICAL
PARAMETERS FOR URBAN POLLUTANTS AT GRAN CANARIA
(CANARY ISLANDS).**

H. Alonso, B. Gonzalez, P. Sancho

Physics Department. ULPGC. 35017 Las Palmas de Gran Canaria (Spain)

ARIMA model have been determined for several hourly series of pollutants at Las Palmas de Gran Canaria. Dry temperature, relative humidity and pressure have been chosen as meteorological parameters for the input of the mentioned multivariate model. It has been determined that high values of dry air temperature increase the photochemical transformations between the different pollutants. Also, the dependence of the pollutant transformation and the trade winds have been identified. Finally, stable, high-pressure episodes have been related to the pollutant persistence at the urban atmosphere.