To confirm this fact, for each of the 4 OSPs grouped before, the maximum daily concentration of ozone has been averaged for all the days belonging to every OSP. The spatial interpolation of the values has resulted in the maps represented in Figure 6, which shows how OSP-A can be classified as a situation leading to high levels of O_3 in all the territory (in that sense it could be classified as "statewide"). OSP-D is also related to high levels of ozone, but mainly in the regions situated in the NE (mainly affecting AQZ 6 & 8). OSP-B and OSP-C correspond to situations with low immission values. It is important to note that all graphs show lower levels of ozone in the area of Barcelona and its metropolitan region. This has to do with the well known fact that usually ozone episodes take place far away from the main emission sources.
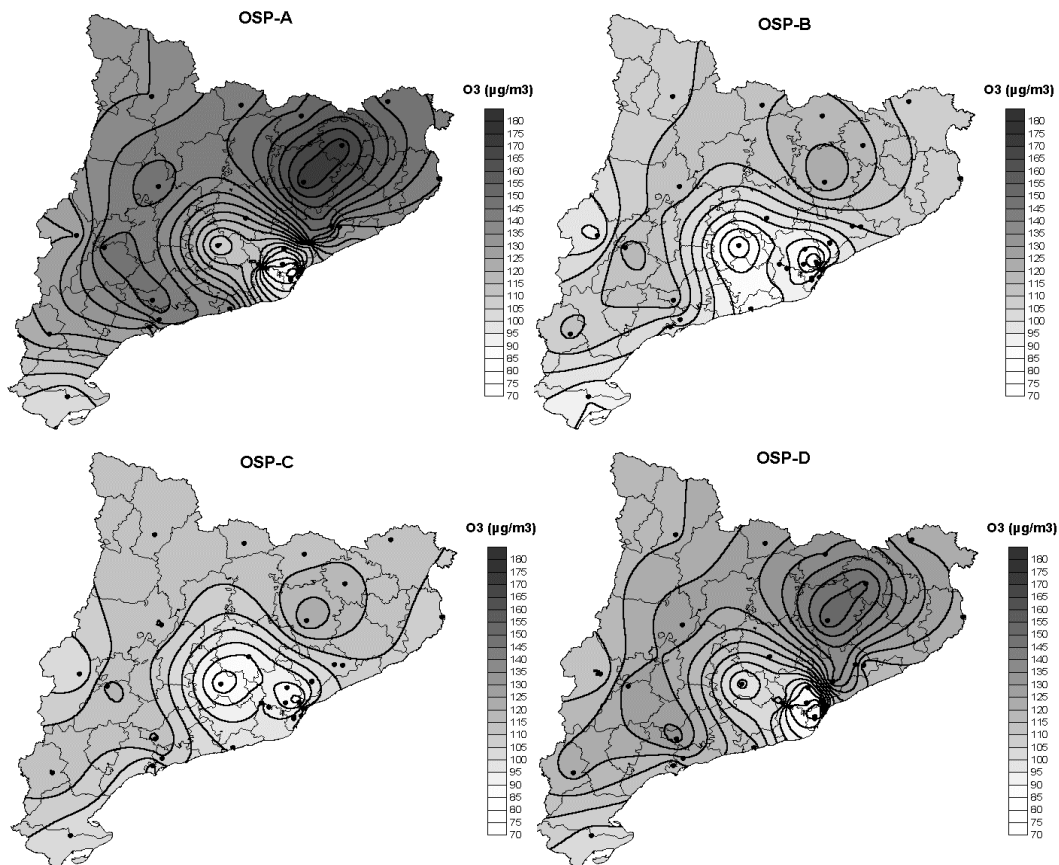

Fig. 6; Average maps of maximum daily O_3 concentration registered in the measurement network (stations represented as dots) under the different synoptic processes.

REFERENCES

Fernández, A.J., J. Martín-Vide, Y.A. Díaz and A. Mestre, 2003: Aplicación de los procesos sinópticos objetivos a la Península Ibérica en otoño. *Investigaciones Geográficas*, **31**, 37-65, Alicante, Universidad de Alicante.

Kim Oanh, N.T., P. Chutimon, W. Ekbordin and W. Supat, 2005: Meteorological pattern classification and application for forecasting air pollution episode potential in a mountain-valley area**.** *Atmospheric Environment*, **39**, 7, 1211-1225.

Soriano, C., A. Fernández and J. Martín-Vide, 2005: On the use of the classification of objective synoptic processes and high resolution meteorological models for studies in the mesoscale. *Meteorology and Atmospheric Physics*. In press.