Atmos. Chem. Phys. Discuss., 3, S537–S538, 2003 www.atmos-chem-phys.org/acpd/3/S537/
© European Geophysical Society 2003



**ACPD** 

3, S537-S538, 2003

Interactive Comment

## Interactive comment on "An evolution strategy to estimate emission source distributions on a regional scale from atmospheric observations" by P. O'Brien et al.

## **Anonymous Referee #2**

Received and published: 13 May 2003

Most of my previous comments have been addressed adequately and the paper is now much more balanced, except for two items:

- on page 1339, line 17, the phrase 'source activity' is used, where I think 'source strength' is meant. If so, I recommend to use strength, since activity may erroneously refer to economic activities etc.
- the response of the authors on my earlier remarks to the comparison of ES with SVD sections 5 and 7 was to incluse the phrase 'in almost all cases the ES improves over the SVD results when compared at equivalent resolutions' (abstact; p. 1343, line 21; p. 1347, line 2). However, in my view comparison of Fig. 5 and 6 (a) and (b) does not support such a statement.

Full Screen / Esc

**Print Version** 

Interactive Discussion

**Discussion Paper** 

© EGS 2003

It is true for the area source (right side), but not for the distributed source:

- (a) low resolution: both fail completely;
- (b) medium resolution: both show false sources or miss sources
- ES misses some central points and is off at the far left and far right side and at the top-right side;
- SVD is far off at the bottom-left and far right side and side and at the top-centre.

I do not have an alternative siggestion, but it seems that this conclusion is not well defined.

Interactive comment on Atmos. Chem. Phys. Discuss., 3, 1333, 2003.

## **ACPD**

3, S537-S538, 2003

Interactive Comment

Full Screen / Esc

Print Version

Interactive Discussion

**Discussion Paper** 

© EGS 2003