

Interactive comment on “Global fire activity patterns (1996–2006) and climatic influence: an analysis using the World Fire Atlas” by Y. Le Page et al.

Anonymous Referee #2

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General Comments

The present paper makes use of the European Space Agency’s World Fire Atlas (WFA) active fire dataset over a period of 10 years (1996 - 2006) to investigate temporal and spatial variations of fire occurrence, to identify areas with similar fire behavior, and to investigate climate influence on global fire patterns. The authors make use of EOF statistics and a cluster method to analyze WFA data. The performed analyses point out the role of ENSO on global fire variability. The study is interesting in general and particularly helpful for users of the WFA product. The paper is generally well written and I recommend its publication in ACP after some improvements.

Specific Comments

- Since you are dealing with a global fire product I suggest using another expression than "Wildfires". In literature the word "wildfires" refers mostly to describe hazardous temperate or boreal forest fires. Since you deal with all kind of different fires the expression "wildland fire", or simply "vegetation fire" would be more correct.

- In my opinion the methodology part requires a better description (section 3). I suspect that many readers of ACP are not totally familiar with the applied statistical methods. In particular the "Standardisation" of the WFA exploratory analysis (section 3.2) is not totally clear to me, and the PCA description and cluster procedure is hard to follow (although the general purpose is clear). Maybe one or the other formulae would help a better understanding.

Minor/Technical Corrections

p.17301, l. 19: change "satellites" to "satellite" singular l. 24/25: why? - Explain.

p. 17302, l. 5: insert "its" after "...impacts," l. 15: remove commas before and after "therefore"

p.17303, l. 12: Why would that be expected, this is not intuitively clear. l. 15: remove "on" after "reported"

p. 17305, l. 3: for clarity better write: "We evaluated these datasets..." instead of "They were..."

p.17306, l. 3: replace "thresholdings" with "thresholds" l. 6: remove "the" before "date"

p.17307, l. 1: Replace "It" with "This feature..."

p.17309. l. 1: include coma after "Consequently"

p.17310, l. 5: delete "the" before "NOAA" l. 11: delete comma before "warm phases" l. 21: replace "in" by "on" before "regions"

p. 17312, l. 6ff: put abbreviations for ecosystems in parentheses, remove the comas before the full name and delete semicolons l.18: replace "small" by "low" l.25: delete "as mentioned before"

p.17313, l. 1: put "be" after "also" l. 19: correct the "CO2"

p.17316, l. 17: expressions "and it hardly ever affected...", revise, very informal.

p.17317, l. 9: insert "be" before "an"

Figure 2: legend: remove "the" before "NOAA"

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 17299, 2007.

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Interactive Discussion

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