Accepted Manuscript

Impacts of ozone air pollution and temperature extremes on crop yields: Spatial variability, adaptation and implications for future food security

Amos P.K. Tai, Maria Val Martin

PII: S1352-2310(17)30583-6

DOI: 10.1016/j.atmosenv.2017.09.002

Reference: AEA 15540

To appear in: Atmospheric Environment

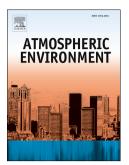
Received Date: 8 April 2017

Revised Date: 31 August 2017

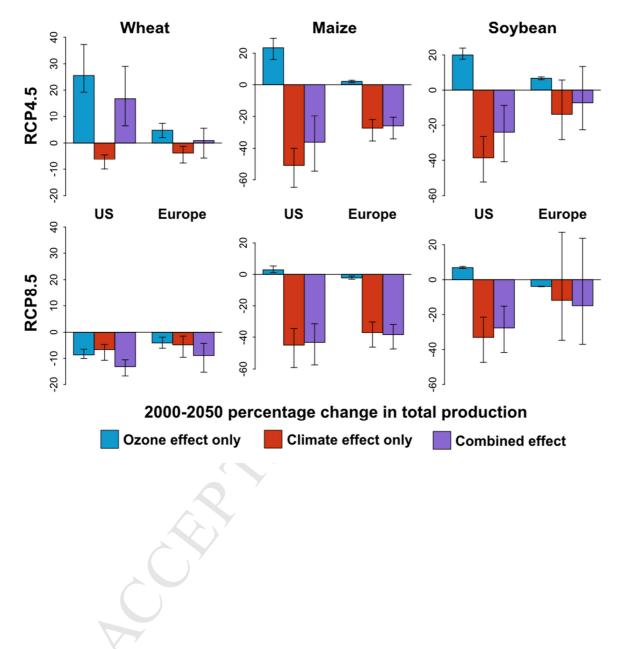
Accepted Date: 1 September 2017

Please cite this article as: Tai, A.P.K., Val Martin, M., Impacts of ozone air pollution and temperature extremes on crop yields: Spatial variability, adaptation and implications for future food security, *Atmospheric Environment* (2017), doi: 10.1016/j.atmosenv.2017.09.002.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



We develop a statistical model to estimate spatially varying crop yield sensitivity to ozone exposure and temperature extreme, correcting for ozone-temperature covariation. We find much larger and more spatially varying yield sensitivity to ozone than previous studies, and thus larger effects of ozone enhancement or mitigation on future US and European crop production.



Download English Version:

https://daneshyari.com/en/article/5752800

Download Persian Version:

https://daneshyari.com/article/5752800

Daneshyari.com