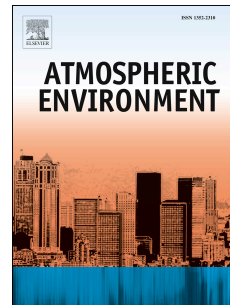


Accepted Manuscript

Seasonal variation of organochlorine pesticides in the gaseous phase and aerosols over the East China Sea

Tianyi Ji, Tian Lin, Fengwen Wang, Yuanyuan Li, Zhigang Guo



PII: S1352-2310(15)00217-4

DOI: [10.1016/j.atmosenv.2015.03.004](https://doi.org/10.1016/j.atmosenv.2015.03.004)

Reference: AEA 13677

To appear in: *Atmospheric Environment*

Received Date: 2 November 2014

Revised Date: 27 February 2015

Accepted Date: 4 March 2015

Please cite this article as: Ji, T., Lin, T., Wang, F., Li, Y., Guo, Z., Seasonal variation of organochlorine pesticides in the gaseous phase and aerosols over the East China Sea, *Atmospheric Environment* (2015), doi: 10.1016/j.atmosenv.2015.03.004.

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.

1 **Seasonal variation of organochlorine pesticides in the gaseous phase and aerosols**
2 **over the East China Sea**

3 Tianyi Ji¹, Tian Lin^{2*}, Fengwen Wang¹, Yuanyuan Li¹, Zhigang Guo^{1*}

4 ¹Shanghai Key Laboratory of Atmospheric Particle Pollution Prevention, Center for
5 Atmospheric Chemistry Study, Department of Environmental Science and
6 Engineering, Fudan University, Shanghai 200433, China

7 ²State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry,
8 Chinese Academy of Sciences, Guiyang 550002, China

9 *Corresponding author: Tel.: (+86) 21 65643117 Email: lintian@vip.gyig.ac.cn and
10 guozgg@fudan.edu.cn

11

12 **Abstract**

13 Eighty paired gaseous phase and PM_{2.5} (particulate matter < 2.5 μm in diameter)
14 samples, covering four seasons from October 2011 to August 2012 were collected
15 simultaneously from a remote island in the East China Sea (ECS). The samples were
16 analyzed for organochlorine pesticides (OCPs) to determine their seasonal variation
17 and potential sources over the coastal marine environment. The concentrations of
18 individual OCPs in the PM_{2.5} samples were higher in winter and lower in summer,
19 and the reverse trend was observed for the measured OCP compounds (except
20 hexachlorocyclohexanes, HCHs) in the gaseous phase. Principal component analysis
21 revealed one trend that contributed 40% to PM_{2.5}-bound OCPs characterized by
22 β-HCH, α-HCH, *p,p'*-dichlorodiphenyldichloroethane (*p,p'*-DDD),

Download English Version:

<https://daneshyari.com/en/article/6338197>

Download Persian Version:

<https://daneshyari.com/article/6338197>

[Daneshyari.com](https://daneshyari.com)