

# **International Conference on Planetary Boundary Layer and Climate Change 2009**

**IOP Conference Series: Earth and Environmental Science  
Volume 13**

**Cape Town, Africa  
26 - 28 October 2009**

**ISBN: 978-1-5108-0211-7  
ISSN: 1755-1307**

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© by the Institute of Physics  
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact the Institute of Physics  
at the address below.

Institute of Physics  
Dirac House, Temple Back  
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481  
Fax: 44 1 17 920 0979

[techtracking@iop.org](mailto:techtracking@iop.org)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2634  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## ***Table of contents***

### **Volume 13**

**International Conference on Planetary Boundary Layer and Climate Change  
26–28 October 2009, Cape Town, South Africa**

Accepted papers received: 3 August 2010  
Published online: 7 September 2010

### **Papers**

012001

[Global causes and effects of the climate change and glaciations on the Earth \(A review\)](#)

V M Kotlyakov""r i 03

012002

[Cryosphere and climate](#) T E Khromova""r i 032

012003

[A stable boundary layer perspective on global temperature trends](#) R T McNider, J R

Christy and A Biazar""r i 03:

012004

[Contrasting the surface ocean distribution of bromoform and methyl iodide; implications for boundary layer physics, chemistry and climate](#) C J Palmer""r i 054

012005

[Several PBL parameterization lessons arrived at running an NWP model](#) Fedor Mesinger""r i 064

012006

[Temporal and spatial changes in mixed layer properties and atmospheric net heat flux in the Nordic Seas](#) A Smirnov, A Korablev, G Alekseev and I Esau""ri 076

012007

[Integral statistical eco-indices – effective complementary tool for assessment of ecological state of and ecological risks for water ecosystems](#) I Bashamkova""ri 083

012008

[Modelling the impacts of deforestation on monsoon rainfall in West Africa](#) B J Abiodun, J S Pal, E A Afiesimama, W J Gutowski and A Adedoyin""ri 089

012009

[Impact of land cover changes on the South African climate](#) T I Ngwana, M-E Demory, P L Vidale, R S Plant and M P Mbedzi""ri 093

012010

[Determining astronomical seeing conditions at Matjiesfontein by optical and turbulence methods](#) M Nickola, I Esau and G Djolov""ri 0: 6

012011

[A micro-meteorological experiment in the atmospheric boundary layer in Highveld region](#) I N Esau, S S Zilitinkevich, G Djolov and C J deW Rautenbach""ri 0; 2

012012

[A Study of stable Atmospheric Boundary Layer over highveld South Africa](#) P Luhunga, I Esau and G Djolov""ri 0; :