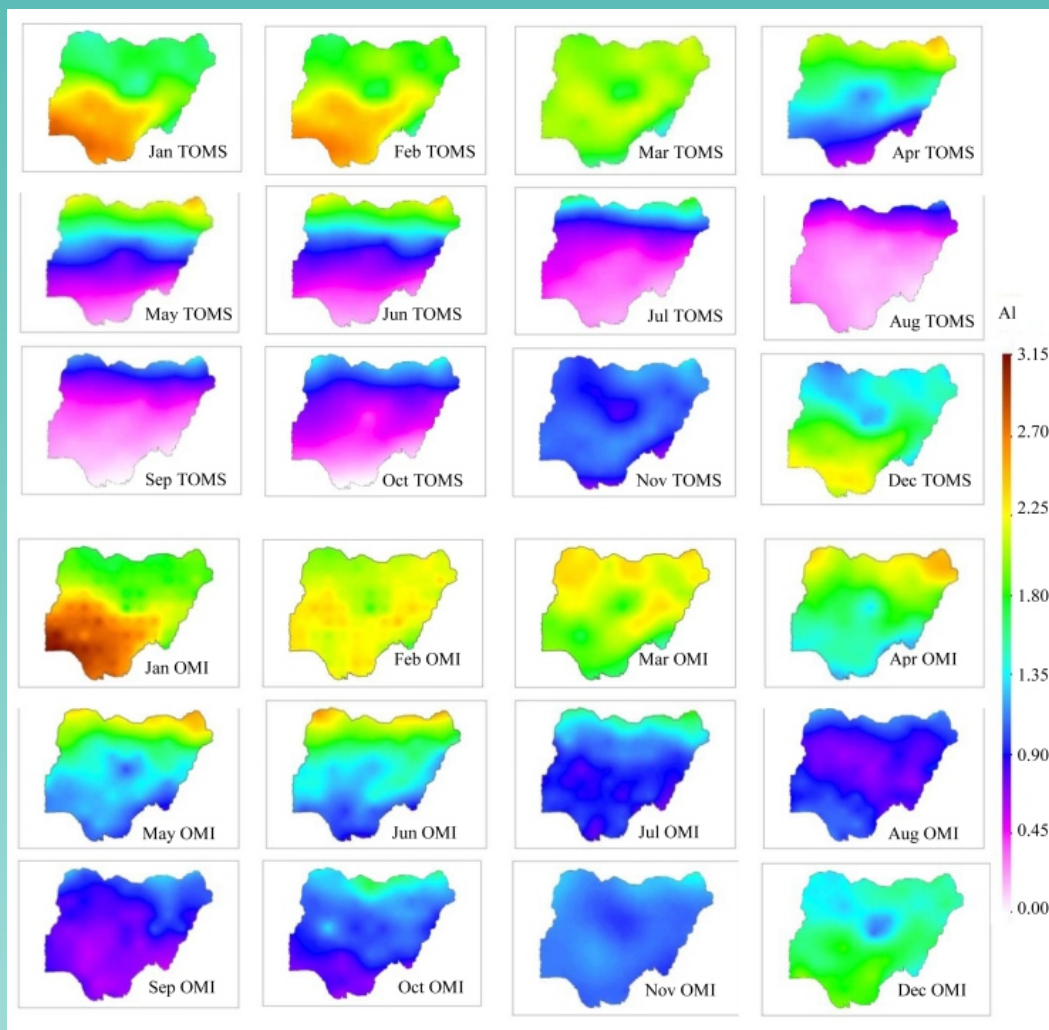


# Atmospheric and Climate Sciences



ISSN: 2160-0414



# Journal Editorial Board

ISSN 2160-0414 (Print) ISSN 2160-0422 (Online)

<http://www.scirp.org/journal/acs>

---

## Editor-in-Chief

**Prof. Shaocai Yu** North Carolina State University, USA

## Editorial Board

**Dr. Jørgen Brandt** Aarhus University, Denmark  
**Prof. Chak K. Chan** Hong Kong University of Science and Technology, China  
**Prof. Yoon-Seok Chang** Pohang University of Science and Technology, South Korea  
**Dr. Ke Du** University of Calgary, Canada  
**Dr. Jiwen Fan** Pacific Northwest National Laboratory, USA  
**Dr. Guobin Fu** CSIRO Land and Water, Australia  
**Dr. Paolo Di Girolamo** Università degli Studi della Basilicata, Italy  
**Dr. Andreas Hofzumahaus** Institute of Energy and Climate Research, Germany  
**Dr. Yanqing Lian** University of Illinois at Urbana-Champaign, USA  
**Prof. Ioannis Liritzis** University of the Aegean, Greece  
**Prof. Junboun Park** Seoul National University, South Korea  
**Dr. Alessandro Pezzoli** Turin Polytechnic, Italy  
**Prof. Rajib Shaw** Kyoto University, Japan  
**Prof. Daniel Tong** US NOAA Air Resources Laboratory, USA  
**Prof. Julian Wang** US NOAA Air Resources Laboratory, USA  
**Prof. Tijian Wang** Nanjing University, China  
**Dr. Jianjun Xu** George Mason University, USA  
**Prof. Fangqun Yu** State University of New York at Albany, USA  
**Prof. Qiang Zhang** Sun Yat-sen University, China

## Table of Contents

Volume 6    Number 3

July 2016

### **Current Networks of Long Proxies for Building Reconstruction Models of the Atlantic Multidecadal Oscillation**

M. Lindholm, R. Jalkanen, M. G. Ogurtsov.....367

### **An Analysis of the Spring-to-Summer Transition in the West Central Plains for Application to Long Range Forecasting**

R. G. Newberry, A. R. Lupo, A. D. Jensen, R. A. R. Zalipynis.....375

### **Flows' Similarities between Tornadoes or Cyclones Kinematics and Motions Resulting from Weather Phenomena Coupling Geostrophic Wind with Passive Convection**

C. Mbane Biouele.....394

### **Temperature and Precipitation Fluctuation of Madinah-Al-Munawara, Kingdom of Saudi Arabia (1959-2011)**

S. Khan, Y. Alghafari.....402

### **Profile and Precipitation Retrievals and Validation Based on Geostationary Sub-Millimeter Atmospheric Sounder**

J. Y. He, S. W. Zhang, H. Liu, Y. Zhang.....415

### **Monthly Temporal-Spatial Variability and Estimation of Absorbing Aerosol Index Using Ground-Based Meteorological Data in Nigeria**

M. Balarabe, K. Abdullah, M. Nawawi, A. E. Khalil.....425

### **Assessment of Climate Change in Nicaragua: Analysis of Precipitation and Temperature by Dynamical Downscaling over a 30-Year Horizon**

J. M. Solé, R. Arasa, M. Picanyol, M. Á. González, A. Domingo-Dalmau, M. Masdeu, I. Porrás, B. Codina.....445

### **An Analysis of Climate Impact on Landscape Design**

X. P. S. Chen.....475

## **Atmospheric and Climate Sciences (ACS)**

### **Journal Information**

#### **SUBSCRIPTIONS**

The *Atmospheric and Climate Sciences* (Online at Scientific Research Publishing, [www.SciRP.org](http://www.SciRP.org)) is published quarterly by Scientific Research Publishing, Inc., USA.

#### **Subscription rates:**

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: [sub@scirp.org](mailto:sub@scirp.org)

#### **SERVICES**

##### **Advertisements**

Advertisement Sales Department, E-mail: [service@scirp.org](mailto:service@scirp.org)

##### **Reprints (minimum quantity 100 copies)**

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: [sub@scirp.org](mailto:sub@scirp.org)

#### **COPYRIGHT**

##### **COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:**

Copyright © 2016 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

##### **COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:**

Copyright © 2016 by author(s) and Scientific Research Publishing Inc.

##### **REUSE RIGHTS FOR INDIVIDUAL PAPERS:**

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

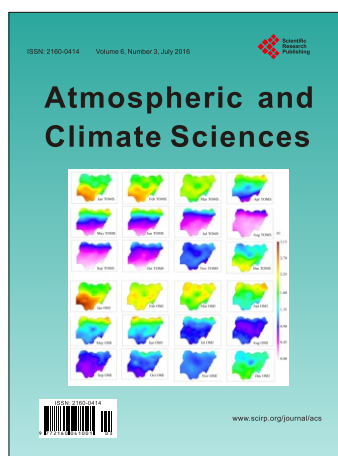
##### **DISCLAIMER OF LIABILITY**

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

#### **PRODUCTION INFORMATION**

For manuscripts that have been accepted for publication, please contact:

E-mail: [acs@scirp.org](mailto:acs@scirp.org)



# Atmospheric and Climate Sciences (ACS)

ISSN 2160-0414 (Print) ISSN 2160-0422 (Online)

<http://www.scirp.org/journal/acs>

## Editor-in-Chief

Prof. Shaocai Yu

North Carolina State University, USA

## Subject Coverage

This journal invites original research and review papers that address the following issues. Topics of interest include, but are not limited to:

**ACS** aims to rapidly publish original scientific papers in all the fields of applied and/or climate atmospheric science. It covers the latest achievements and developments in the applied climate and atmospheric sciences, including but not limited to the following scopes as well as the theoretical and practical aspects of these disciplines:

- Agricultural climatology
- Air chemistry and the boundary layer, clouds and weather modification
- Air quality, atmosphere & health
- Applied meteorology
- Atmospheric acoustics, electricity, optics, physics, radiation and sounding
- Atmospheric and oceanic physics
- Atmospheric and solar-terrestrial physics
- Atmospheric chemistry
- Atmospheric environment
- Aviation climatology
- Biometeorology
- Building climatology and forestry climatology
- Climate change and broadcast meteorology
- Climate dynamics and variability
- Climate policy
- Clouds and precipitation physics
- Cosmical meteorology
- Dendroclimatology
- Dynamics of atmospheres and ocean
- Hydrology, oceans and atmosphere
- Hydrometeorology
- Marine meteorology and meteorology-associated geophysics
- Medical meteorology and medical climatology
- Meteorological, climatological and atmospheric environmental issues
- Navigation climatology
- Phenology and paleoclimatology
- Polar meteorology
- Radar meteorology and radio meteorology
- Remote sensing
- Satellite meteorology and synoptic meteorology
- Theoretical and applied climatology
- Tropical meteorology
- Weather systems, numerical weather prediction

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the **ACS**.

## Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

## Website and E-Mail

<http://www.scirp.org/journal/acs>

E-mail: [acs@scirp.org](mailto:acs@scirp.org)

## ***What is SCIRP?***

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

## ***What is Open Access?***

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



**Scientific  
Research  
Publishing**

**Website: <http://www.scirp.org>**

**Subscription: [sub@scirp.org](mailto:sub@scirp.org)**

**Advertisement: [service@scirp.org](mailto:service@scirp.org)**