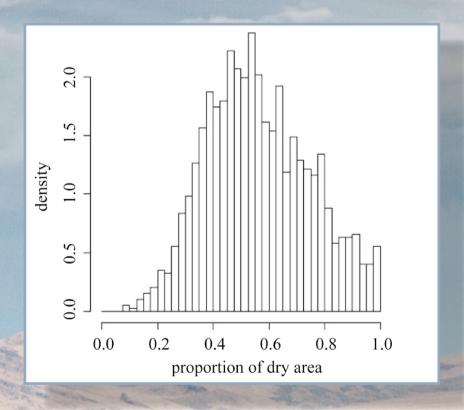




American Journal of Climate Change

Special Issue on Extreme Weather and Climate Change





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Special Issue on Extreme Weather and Climate Change

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Human-induced global warming is accelerating global hydrological cycles, and altering spatiotemporal patterns of precipitation. This results in increased occurrence of floods and droughts in many regions of the world. Climate change has become a major concern for academic communities and policy-makers, owing to the tremendous impacts on human societies. For example, higher frequencies of weather extremes pose a potential threat to at-risk populations. Tropical storms, floods, and droughts affect human welfare directly through catastrophic damage or indirectly through adverse effects on crop productivity. In recent years, climate change and related impacts on human societies, particularly on ecological environments, biodiversity, water resources, agriculture and food security, have become of unprecedented importance because of the significant role of the availability, accessibility and security of food and water in the stability and sustainability of human communities.

There are various causes underlying climate change, weather and hydrological extremes at regional or global scales, including human-emission of green house gases, alterations of hydrological cycles, ENSO activities and

so on. Moreover, some scientific problems are still open for debate, e.g.

- What are the changing features of global warming processes at regional scales?
- Are hydrological responses to climate changes similar or different at local, river-basin, regional and even global scales, and what are the differences between them, if any?
- How do global-warming-induced weather and hydrological extremes impact on human society, eco-logical environments, bio-diversity and water resource systems?
- What are the risks or threats that human settlements are facing along coastal regions under the influences of climate change?

All these relevant problems need urgent answers for the sake of sustainable development of human societies. This special issue will focusing on, but not limited to, the above-mentioned problems, with an aim to arouse wide scientific discussions on the above-mentioned topics.

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TABLE OF CONTENTS

Volume 2	Number 3A	September 2013
Special Issu	e on Extreme Weather and Climate Cha	ange
Guest Edito	ors: Prof. Qiang Zhang, Prof. Vijay P. Si	ngh, Prof. Michael James C. Crabbe
Spatially Exp	olicit Modeling of Long-Term Drought Impact	s on Crop Production in Austria
F. Strauss, E.	Moltchanova, E. Schmid	1
Track Patter	ns of Landfalling and Coastal Tropical Cyclon	es in the Atlantic Basin,
Their Relatio	onship with the North Atlantic Oscillation (NA	O), and the Potential
Effect of Glob	bal Warming	
T. A. McClos	key, T. A. Bianchette, KB. Liu	12
Spanish Extr	eme Winds and Their Relationships with Atla	ntic Large-Scale Atmospheric Patterns
A. Pascual, F.	Valero, M. L. Martín, C. García-Legaz	23
Climate Char	nge and Variability in Southeast Zimbabwe: S	cenarios and Societal Opportunities
D. Chikodzi,	T. Murwendo, F. M. Simba	36
Extremes of S	Severe Storm Environments under a Changiną	g Climate

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American Journal of Climate Change (AJCC) is an international scientific journal dedicated to the publication of high-quality research articles, short communications and review papers on all aspects of climate change and related areas. The objectives of this journal are to chronicle the important publications in the rapidly growing field of climate change and to stimulate research in the area.

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