# Introduction for Volume 8, Issue 1

This issue contains 6 papers which can be divided into five topics: eco-environment risk, crop meteorological disaster risk, tourism disaster risk analysis，emergency management and financial risk.

There are two papers in eco-environment risk. The first paper "A Fuzzy Method for Assessing Eco-Environmental Disaster Risk Caused by Coalbed Methane in China" by Ye Xue, *et al.*, constructs an eco-environmental disaster risk assessment model during coalbed methane industrialization development in China by using intuitionistic fuzzy sets to describe the uncertain risk information, and the transformed interval value of Mamdani intuitionistic fuzzy neural networks model. Its validity is verified by simulation tests. Furthermore, the assessment results are compared with those obtained by fuzzy neural networks model. The study supplies a decision support for routine supervision in eco-environmental risk assessment of coalbed methane industrialization developmen. In the second paper "Geochemical and Clay-Size Minerals Evidence for the Provenance of LQC Loess Deposits in the Central Shandong, Northern China" by Min Ding, *et al.*, the clay-size($< 5\,\mu$m) minerals and major elements composition of bulk samples and of two grain-size fractions ($< 20\,\mu$m and 20~63$\,\mu$m) were analyzed in order to determine the provenance of the LongQiaoCun(LQC) loess in the Central Shandong based on comparisons with loess from the Chinese Loess Plateau and with Yellow River sediments. Statistical analysis of the sedimentary clay-size minerals reveals that LQC loess deposits in the Central Shandong adjacent to the floodplain of the Yellow River were not blown directly from the northern deserts as is the case of loess deposits in the Chinese Loess Plateau.

There is one papers in crop meteorological disaster risk, "The Design of a Drought Weather Index Insurance System for Summer Maize in Anhui Province, China" by Ying Xu, *et al.*, where the authors analyzed precipitation anomalies of summer maize in order to establish a drought weather index model that is based on tassel appearance and maturity stage as well as drought yield reduction rate. They utilized daily precipitation data encompassing the period between 1971 and 2010 from 15 agricultural meteorological observation stations within a summer maize planting area in Anhui Province, China.

Paper "A Study of Spatial Evolution Patterns of Tourist Destinations Disaster Risks", by Yingyue Sun, *et al.*, focuses on tourism disaster risk analysis, where the authors built a comprehensive disaster risk evaluation model using selected 17 economic and social indicators from tourist destinations in Jilin Province based on the four-factor theory of natural disaster risk formation. The model was used to assess tourist destination disaster risk in the province for the period of 2009 - 2014. Using GIS technology, they developed a tourist destination disaster risk zoning map of 2009－2014 for Jilin Province, classified the spatial evolution patterns of tourist destination disaster risk.

There is one paper in emergency management, which is "Wargame Mapping and Implementation for Emergency Evacuation of Residents in Urban Waterlogging Disaster" by Peng Chen, *et al.*, where the authors introduced the wargame excise to the residents' emergency evacuation in urban waterlogging disaster. As an essential component of wargame, the chessboard (map) is an important tool for the study of deduction and command training. In this paper, the research focuses on the methods of generating wargame map based upon vector map data, from the viewpoints of mathematic foundation as well as quantitative treatments of point, line and plane for the map composed by regular hexagonal grids.

The last article in this issue, titled "Research On the Development of County Finance in Guizhou Province in the Promotion of Precise Poverty Alleviation" by Yu Ding and Mu Zhang, is related to financial risk, where the authors selects the 50 state-level poverty-stricken counties in Guizhou province as the research object, and uses financial scale, financial efficiency and financial structure to represent the level of financial development in each county, using

economic growth and income distribution as controlled variable. The poverty of every county is expressed by poor slow index. Applying the panel data model, the promotion of local financial development to the targeted poverty alleviation is studied. The empirical evidence shows that the financial scale, financial efficiency, financial structure, economic growth and poverty reduction of 50 national poverty-stricken counties in Guizhou province are positively correlated. However the financial scale is more significant to reduce the incidence of poverty than that of financial efficiency.

**Editors-in-Chief**

Prof. Chongfu Huang
Beijing Normal University
No.19 Xinjiekouwai Street
Beijing 100875, China
Email: hchongfu@126.com

Prof. Gordon Huang
Faculty of Engineering and Applied Science,
University of Regina
Regina, Sask S4S 0A2, Canada
Email: gordon.huang@uregina.ca