Droughts: A Global Assesment (Hazards and Disasters)

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Drought hazard assessment and spatial characteristics analysis in China

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Abstract: Based on the monthly precipitation data for the period 1960–2008 from 616 rainfall stations and the phenology data of main grain crops, the spatial characteristics of drought hazard in China were investigated at a 10 km×10 km grid-cell scale using a GIS-based drought hazard assessment model, which was constructed by using 3-month Standard Precipitation Index (SPI). Drought-prone areas and heavy drought centers were also identified in this study. The spatial distribution of drought hazard in China shows apparent east-west difference, with the eastern part of China being far more hazardous than the western part. High hazard areas are common in the eastern and central parts of Inner Mongolian Plateau, the central part of Northeast China Plain, the northern part of Heilongjiang, the southeastern part of Qinghai-Tibet Plateau, the central and southern parts of Loess Plateau, the southern part of North China Plain, the northern and southern parts of Yangtze River Plain, and Yunnan-Guizhou Plateau. Furthermore, obvious differences in drought hazard were found both within and between different agricultural zonings.

Keywords: drought; hazard; spatial characteristics; grid; GIS

1 Introduction

Drought is a normal, recurrent feature of climate, it occurs almost everywhere. Drought is considered by many to be the most complex but least understood of all natural hazards, affecting more people than any other hazard (Hagman, 1984; Wilhite, 2000). The data from Emergency Events Database (www.em-dat.net) show that, throughout the world, droughts account for 5% of the natural disasters, but losses from droughts have caused up to 30% of losses from all disasters, ranking droughts the first among all the natural hazards. A warmer climate, with its increased climate variability, will increase the risk of both floods and droughts (IPCC, 2007). Drought studies have received special attentions in recent years be-

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Buy Droughts: A Global Assesment (Hazards and Disasters) on mydietdigest.com ? FREE SHIPPING on qualified orders.Published in Drought: A Global Assessment, Vol. I, edited by Worldwide, economic damages attributed to natural disasters tripled from the s. (US$40 .Drought: A Global Assessment, Volume 1. Front Cover. Donald A. Wilhite Volume 2 of Routledge hazards and disasters series. Editor, Donald A. Wilhite.Routledjje Hazards and Disasters Series. Published to mark the end of the International Decade for Natural Disaster Reduction, this important new series of .Drought is a global phenomenon that can and does occur in virtually all landscapes The completion of the International Decade for Natural Disaster Reduction.As a result, comprehensive assessments of drought risks are only just beginning and, as yet, there is no credible global drought risk model. Some of the causes of this disaster were not directly due to decreasing rainfall during the drought.The Global Assessment Report GAR is a major initiative of the ISDR that (HFA) through monitoring risk patterns and trends and progress in disaster risk reduction a chapter as first step in presenting the complexities of global drought risk.Annex 2: Proposed Terms of Reference for the Global Drought Risk reduction Network . Drought: A Global Assessment natural hazards, making assessment and response . focused on climate and natural disasters, and in view of.Risk Assessment Procedure for Both Mortality and Economic Losses, Illustrated Figure Global Distribution of Highest Risk Disaster Hotspots by Hazard Type 5 Figure WASP Estimates of Climatic Drought and Drought Disasters for.Recent drought events in the United States and the magnitude of drought losses indicate the continuing vulnerability assessment drought mitigation geographic information systems agriculture Drought: A Global Assessment, Natural Hazards and Disasters Series, .. Springer International Publishing AG. Part of.Global assessment report on disaster risk reduction: summary and Social Impacts & Social Resilience; Hazards: Cyclone, Drought, Earthquake, Flood, Land.Natural disaster hotspots: A global risk analysis. Washington, DC: . In D. A. Wilhite (Ed.), Drought: A global assessment (pp.). London.Drought risk is assessed for the period and is based on the As a result, past attempts to manage drought disasters have been ineffective and its.Drought is a prolonged dry period in natural climate cycle. Pending assessment, anticipated needs would be: Food aid, water supplies, water quality control.UNISDR mandate: Help countries to reducingnot just managedrought risk Global Assessment Report on Disaster Risk Reduction. Cyclone Risk w w.The PREVIEW Global Risk Data Platform is a multiple agencies effort to share It covers tropical cyclones and related storm surges, drought, earthquakes, a support to the Global Assessment Report on Disaster Risk Reduction (GAR) and .People living in poverty are particularly vulnerable to shocks, including those caused by natural disasters such as floods and droughts.Risk data from INFORM, a global open-source risk assessment for Uganda is regularly affected by multiple natural hazards, including droughts, Since , GFDRR has supported the advancement of disaster risk management in Uganda.Routledge hazards and disasters series. Notes. Includes bibliographical references

and indexes. Subjects, Droughts. Other authors/contributors, Wilhite, Donald.Stephane and Bangalore, Mook and Ward, Philip J. () Disaster risk, climate Assessing the Global Exposure of Poor People to Floods and Droughts. 3. 4.