



CAS-TWAS-WMO Forum

**International Symposium on Extreme Weather and Climate
Events, Their Dynamics and Predictions**

October 12-16, 2004 Beijing, China

Program

Organized

Chinese Academy of Sciences (CAS)
Third World Academy of Sciences (TWAS)
World Meteorological Organization (WMO)

Co-sponsored by

China Meteorological Administration (CMA)
State Oceanic Administration (China)
National Natural Science Foundation of China (NSFC)
China Association for Science and Technology (CAST)
Commission on Science and Technology for Sustainable
Development in the South (COMSATS)
Institute of Atmospheric Physics, CAS
International Center for Climate and Environment Sciences (ICCES)

The main theme for the third CTWF international symposium is on the “Extreme Climate and Weather Events, Their Dynamics and Predictions”. This conference is comprised of seven oral presentation sessions and one poster session:

Session A: Statistics of extreme climate and weather events

Session B: Methodology for detection and prediction of extreme climate and weather events

Session C: Variability of climate extremes and climate change

Session D: Simulation and prediction of extreme climate events

Session E: Simulation and prediction of extreme weather events

Session F: Mechanism of extreme weather events

Session G: Poster Session

Session H: Multidisciplinary research related to the extreme events

All meetings will be held in: **Expert Club of Friendship Hotel at second floor, room two.**

October 12, 2004

Opening Session Chair: Prof. Qingcun Zeng	09:00-09:30	Opening ceremony
Session A1 Chair: Dr. Norden E. Huang	09:30-09:55	Shiyan Tao: An Analysis on the Basin-wide Catastrophic Floods (1931,1954,1998) in the Yangtze River during the 20th Century
	09:55-10:20	Clare Goodess: Analysis of recent trends in European extremes and statistical downscaling methods for the construction of scenarios of extremes – results from the STARDEX project
Tea Break & Group Photo	10:20-10:50	
Session A2 Chair: Dr. Clare Goodess	10:50-11:15	Ronghui Huang: The Persistent Droughts in North China from the Late 1970's and their Association with the Interdecadal Variability of the Walker Circulation over the Tropics
	11:15-11:40	Hans von Storch: Extreme Winds, Storm Surges and Ocean Waves – the example of the north sea coast 1960-2000 and 1970-2100
	11:40-12:00	Virulh Sa-yakanit: Time Series for Flooding in Ping River in Thailand
Lunch	12:00-13:30	
Session A3 Chair: Dr. Ole B.Christensen	13:30-13:55	Yihui Ding: Long-term variation of the rainfall pattern in relation to droughts/floods in China
	13:55-14:15	Gaston Demaree: Intensity-Duration-Frequency curves for Precipitation in tropical Central Africa
	14:15-14:35	Jose Marengo: Detection, assessments of impacts and prediction of extreme climate events in Northeast Brazil and the Paraná-La Plata Basin in South America
	14:35-14:55	Vladimir Oganessian: Comparison of The Statistical Characteristics of the Extreme Temperature and Precipitation Totals for Big Russian Cities According to Observed and Data and Model Simulated Results XIX-th – XXI-th Centuries
	14:55-15:15	Panmao Zai: Trends in Total Precipitation and Frequency of Daily Precipitation Extremes over China
Tea Break	15:15-15:30	
Session B Chair: Prof. Hans Von Storch	15:30-15:55	Norden E. Huang: On the Trend, Detrend and the Variability of Nonlinear and Nonstationary Time Series
	15:55-16:20	Olivier Talagrand: Prediction of Extreme Events and Assimilation of Observations
	16:20-16:45	Samuel Shen: Using the Probabilistic Principal Component Index to Monitor the Drought Conditions in Alberta
	16:45-17:10	Francois-Xavier Le Dimet: Models, Data and Errors for Environmental Prediction
	17:10-17:30	Xiaolan Wang: Using non-stationary generalized extreme value models to assess historical and possible future changes of climate extremes
Reception	19:00—	

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Session C1 Chair: Prof. Chongyin Li	08:30-09:00	Filippo Giorgi: Variability and extremes in a regional climate change simulation for the European region
	09:00-09:20	Johnny Chan: Variations of the South China Sea summer monsoon: from interdecadal to intraseasonal
	09:20-09:40	Zhaobo Sun: Interdecadal Variability of East Asian Summer Monsoon and Its relation to the Arctic Oscillation
	09:40-10:00	Renhe Zhang :El-Nino/La nina and the onset of the south China sea monsoon
Tea Break	10:00-10:15	
Session C2 Chair: Prof. Zhaobo Sun	10:15-10:40	Robert E. Dickinson: Extreme Happenings under Climate Change
	10:40-11:00	Luis Jose Mata: Global Persistence in Precipitation Time Series from a General Circulation Model for Historical and Future Time Segments
	11:00-11:20	Akimasa Sumi: Global Warming Simulation by using the High resolution Climate Model
	11:20-11:40	Shaowu Wang: Abrupt climate change and ancient civilizations
	11:40-12:00	Arnaldo Longhetto: Interannual and Interdecadal Variability of Climate Events
Lunch	12:00-13:30	
Session D Chair: Prof. Akimasa Sumi	13:30-13:55	Ole B. Christensen: Modeling studies of current and future extreme climatic events in Europe within the EU project PRUDENCE
	13:55-14:20	Chung-Kyu Park: APCN Multi-Model Ensemble Seasonal Prediction System
	14:20-14:45	Wenjie Dong: On the prediction of summer precipitation in China
	14:45-15:10	Oscar Alves: POAMA Seasonal prediction system: predicting extremes
Tea Break	15:10-15:30	
Session E: Chair: Prof. Samuel Shen	15:30-15:55	Da-Lin Zhang: Numerical Simulation of the Inner-Core Structures and Evolution of Tropical Cyclones
	15:55-16:15	Ping-wah Li: Predicting Rainstorms in Hong Kong-Combining NWP and Nowcasting in an Operational Mode
	16:15-16:35	Sixiong Zhao: Some Extreme Weathers and Related Climate Characteristics in China during Recent Years
	16:35-16:55	Y.P Shao: Dust Emission and Dust Storm Prediction
	16:55-17:15	Lance M. Leslie: Intense South Indian and Southern Ocean Cyclones: Climatology and Modelling
	17:15-17:35	Jianhua Sun: Numerical Simulations of An Integrated Dust Storm Prediction system suitable for North China
Dinner	18:00-	

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Session F: Chair: Prof. Da-Lin Zhang	08:30-08:55	Carlos Nobre: Catarina: the First Hurricane in the South Atlantic?
	08:55-09:20	Guoxiong Wu: Dynamics of the Development of Severe Weather
	09:20-09:45	Chongyin Li: Heavy Rainfall and Atmospheric Intraseasonal Oscillation
	09:45-10:10	Lianshou Chen: Field Experiment and Research Advances on Tropical Cyclone Landfall Process
	10:10-10:35	Shouting Gao: A Convective Vorticity Vector Associated With deep Convection and Its Application to A 2D Cloud-Resolving Modeling
	10:35-10:55	Tae-Young Lee: Mechanism of Heavy Rainfall over Central Korea on 6~7 August 2002
Tea Break	10:55-11:10	
Session G	Poster Session (11:10-12:30)	
Lunch	12:30-13:30	
Session H Chair: Prof. R. E. Dickinson	13:30-14:00	K.N. Liou: Cirrus Clouds and Climate
	14:00-14:20	Zhongbo Yu: On Simulating Hydrologic Processes during Extreme Storm Events with a Coupled Climate and Hydrology Model
	14:20-14:40	Chaohua Dong: Advances in Satellite Applications and Program of China's Current and Future Meteorological Satellite Systems
	14:40-15:00	V. Prinnet: Integrated approach for scenario-based flood simulation
	15:00-15:20	Mu Mu: Applications of Conditional Nonlinear Optimal Perturbations to Predictability of ENSO and Sensitivity Analysis of Ocean's THC
Tea Break	15:20-15:40	
Discussion Chairs: Prof. Filippo Giorgi Prof. K.N. Liou Dr. Norden Huang Prof. J. Zhu	15:40-17:00	
Closing Ceremony	17:00-17:30	
Banquet	18:00-	

October 15, 2004

Sightseeing

Session G (Poster Session)

Code	Name	Topic
G1	Haishan Chen	Anomalous Variations of vegetation coverage in mid-high latitude of Eurasian Continent and Its impacts on climate Over East Asia from recent 20 years Satellite Remote Sensing data
G2	Maochang Cui	El Nino Phenomenon in SODA Data
G3	Xingang Dai	A quasi-geostrophic wavelet-spectrum model for barotropic atmosphere and its numerical solution
G4	Jinqiao Duan	Three Dimensional Nonhydrostatic Dynamics of Oceanic Density Currents
G5	Kuranoshin Kato	To be determined
G6	Jeong Hyeong LEE	Bayesian Forecast of Climate Change Signal over the Korean Peninsula
G7	Shida Liu	Extreme temperature and precipitation for weather and climate
G8	Shihua Lu	Simulation of oasis breeze circulation in the arid region of the Northwestern China
G9	Khageshwar Singh Patel	The influence of climate on precipitation chemistry over central India and applications to future acidic deposition
G10	Valeria Popova	Recent extremes of surface air temperature in Northern Eurasia as a reflection of large-scale atmospheric circulation variations
G11	K. Rubinstein	Simulation of Extreme Snow Events Over Eurasia in GCMS Experiments
G12	Sajjad Saeed	Decadal Variability of Disastrous Climate and Weather Events in Pakistan
G13	Ghulam Rasul	A Diagnosis Study of Heavy Rainfall in Karachi Due to Merging of a Meso-Scale Low and a Diffused Tropical Depression during South Asian Summer Monsoon
G14	N. Shulgina	Extreme weather and climate events in Central Asia
G15	Andrey Shmakin	Distribution of temperature and precipitation extremes in Northern Eurasia in the 20 th century
G16	Keon Tae SOHN	Statistical Prediction of Heavy Rainfall in South Korea
G17	Zhemin Tan	To be determined
G18	Jie Wei	The Extreme Climate Events of Droughts in North China during 1999-2000
G19	Angkool Wangwongchai	A Case Study on Strong Tropical Disturbance and Record Heavy Rainfall in Hat Yai, Thailand During Winter Monsoon
G20	Prungchan Wongwises	The Application of Adaptive Mesh to the Numerical Forecasting of Tropical Storm Track
G21	Kieu Thi Xin	Heavy rainfall forecast using the higher resolution regional model in Vietnam and improving initialization problem
G22	Gui Zhang	The Impact of Observational Errors on the Variational Assimilation Method in Diffusion Equation

G23	Lifeng Zhang	A Dynamic Mechanism of South China Sea Summer Monsoon Onset
G24	Qingyun Zhang	The persistent heavy rainfall over Yangtze River valley and its associations with the Circulations over East Asian during summer
G25	Xiangdong Zhang	Intensification of Arctic Cyclone Activity During the Half of 20th Century
G26	Xie Zhuang	A Study on the Severe Hot Weather in Beijing and North China Part I. Statistics and Synoptic Case Study
G27	Zuo Ruiting	Detailed Analysis on the Dynamic and Thermodynamic Characters of Physical Processes of IAP3.0