



中南大学风工程研究中心
(www.windcsu.org)

关键参数	数值
导流片偏转角度	70°
测试区域直径	12m
气流上升通道	5m
进气通道高度	0.2~2.5m
涡核半径	0.5~2.1 m
涡流比	0~6.0
最大切向风速	30 m/s
最大移动速度	0.5 m/s

第三届龙卷风模拟与灾害防控国际研讨会

3rd International Workshop of Tornado Simulation and Disaster Prevention

2025年12月
湖南·长沙



Preface book

会序册

3rd International Workshop of Tornado Simulation and Disaster Prevention

(第三届龙卷风模拟与灾害防控国际研讨会)

Chairmen: Xuhui He 主席:何旭辉

December 28 (Arrival) 到达	
9:00am – 18:00pm	Check-in (报道)
18:00pm – 20:00pm	Dinner (晚宴)
December 29 Time: 8:00am – 18:00pm 时间:8:00am – 18:00pm Location: C201, Century Building, Tianxin Campus, Central South University 地点:中南大学天心校区世纪楼C201	
8:00am – 10:10am	Session I (Moderator: Prof. Haiquan Jing 主持人:敬海泉)
8:00am – 8:10am	Opening Remarks 开幕式
8:10am – 8:40am	Presentation by Prof. Ashraf El Damatty (Western University)
	Presentation Title: Research Advances on Structural Design of Wind Turbine Towers 风力发电塔结构设计研究进展
8:40am – 9:10am	Presentation by Prof. Lin Zhao (Guangxi/Tongji University) 赵林教授 广西/同济大学
	Presentation Title: Wind-induced Interference Effects and Elastic-plastic Failure Assessment of Large Cooling Towers Under Tornado-like Vortices 类龙卷风涡旋作用下大型冷却塔的风致干扰效应与弹塑性破坏评估
9:10am – 9:40am	Presentation by Prof. Zhiyong Meng (Peking University) 孟智勇教授 北京大学
	Presentation Title: Synoptic Background Causes of Differences in Tornado Frequency between China and the United States 中国和美国龙卷数量差异的天气背景成因
9:40am – 10:10am	Coffee Break 茶歇
10:10am – 11:40am	Session II (Moderator: Prof. Haiquan Jing 主持人:敬海泉)
10:10am – 10:40am	Presentation by Prof. Sanjay Kumar Pandey (Indian Institute of Technology)
	Presentation Title: A Viscous Model of Wind Fields in Single-cell Tornado-like Vortices 龙卷风荷载研究进展和关键问题
10:40am – 11:10am	Presentation by Prof. Shuyang Cao (Tongji University) 曹曙阳教授 同济大学
	Presentation Title: Preparation for Wind-related Disasters Due to Climate Change 应对气候变化引发的风灾准备

11:10am – 11:40am	Presentation by Prof. Dongqin Zhang (Central South University) 张东琴教授 中南大学
	Presentation Title: Investigating the Disaster Mechanisms and Risk Prevention of Railway Vehicle-bridge Systems under Tornadoes 龙卷风作用下铁路车-桥系统灾变机理及风险防控
11:40am – 13:30pm	Lunch
13:30pm – 14:30pm	Visiting 参观
14:30pm – 16:30pm	Session III (Moderator Prof. Zhenru Shu 主持人:舒臻孺)
14:30pm – 15:00pm	Presentation by Prof. Li Tian (Shandong University) 田利教授 山东大学
	Presentation Title: Failure Mechanisms and Performance Assessment of Transmission Tower-Line Systems under Severe Convective Weather 强对流天气下输电塔-线体系灾变机理与性能评估
15:00pm – 15:30pm	Presentation by Prof. Yi Yang (South China University of Technology) 杨易教授 华南理工大学
	Presentation Title: Investigation and Intensity Analysis of the Guangzhou “4·27” Tornado by Integrating Multi-Source Data and WRF Simulation 基于多源数据与WRF模拟融合的广州“4·27”龙卷风调查与强度分析
15:30pm – 16:00pm	Presentation by Prof. Lei Zhou (Central South University) 周蕾教授 中南大学
	Presentation Title: Towards Tornado-Resilience of Wind Turbines: Wind Field Intelligent Modeling and Dynamic loads Analysis 迈向风机抗龙卷风能力提升:风场智能建模与动态载荷分析
16:00pm – 16:30pm	Coffee Break 茶歇
16:30pm – 18:00pm	Session IV (Moderator Prof. Dongqin Zhang 主持人:张东琴)
16:30pm – 17:00pm	Presentation by Researcher Lanqiang Bai (Foshan Tornado Research Center) 白兰强研究员 佛山龙卷风研究中心
	Presentation Title: Radar Observations of Recent Tornadic Storms in Southern China 中国南方地区近期龙卷风的雷达观测
17:00pm – 17:30pm	Presentation by Assoc. Researcher Han Zhang (Suzhou Institute for Advanced Research, University of Science and Technology of China) 张寒副研究员 中国科学技术大学苏州高等研究院
	Presentation Title: Three-dimensional Modeling of the Tornado-like Vortex 龙卷风场三维建模研究
17:30pm – 18:00pm	Presentation by Dr. Shiqin Zeng (Central South University) 曾世钦博士 中南大学
	Presentation Title: Experimental Study on Tower Base Loads of A Parked HAWT Under Tornadoes 龙卷风作用下停机水平轴风力涡轮机塔底载荷实验研究
18:00pm – 20:30pm	Ceremony and Dinner 闭幕式和晚宴
December 30 (Visiting and Departure) 参观和返程	

