



ISSN 1006-009X
CN 22-1135/TH

气象水文海洋仪器

主办单位：中国仪器仪表学会气象水文海洋仪器分会 长春气象仪器研究所

METEOROLOGICAL, HYDROLOGICAL AND MARINE INSTRUMENTS

2

2015
第32卷
(总114期)

ISSN 1006-009X



9 771006 009007

万方数据

Meteorological, Hydrological and Marine Instruments

Vol. 32 No. 2 (Sum. 114) June 2015

Contents

Research and Disussion

- Analysis on the average noise power statistic characteristics of wind profile radar Zhou Xuhui, Wang Jianbo, Wang Liming, et al. (1)
- Research on the evaluation method of static meteorological equipment support capability Tu Aiqin, Huang Lei, An Zhongliang, et al. (5)
- Climatological calculation and distribution characteristics of global solar radiation in Hebei province Li Cuina, Qin Shiguang, Wu Jiancheng (10)
- Analysis on data differences between PWD20 forward scatter visibility meter and manual observation Shu Genghao, Zhao Tingbin, Ji Dan (14)
- Quality control method for hour precipitation data of regional automatic weather station Jiang Ming, Dang Yue, Li Xiaobo, et al. (18)
- Uncertainty evaluation on measurement results for error value of humidity instrument Deng Weiqin (24)
- Analysis and research on the ultrasonic inspection of observation data for temperature and humidity sensor Liu Baojun, Ran Jianxin, Song Zhilong (27)
- Calibration method based on MSCTI rapid temperature conductivity meter Liao Heqin, Zhang Ting, Zou Qiang, et al. (30)
- Method and process on hoisting technology of new generation weather radar Li Hongtu, Shu Yi (35)
- Calculation method on the lightning hazards assessment affected by surrounding building structures Feng He, Hu Yong (39)
- Research on vertical distribution of temperature and wind direction above paddy field during flowering stage and its motive roughness characteristics Luan Meng, Jin Xican, Shen Fengchun, et al. (44)

Design and Application

- Design and implementation of weather process case information service system in Xinjiang Yang Liu, Liu Sunjun, Tang Hao (50)
- Application of GoogleMap in marine dumping surveillance system Qi Yong, Miao Bin, Zhang Keke, et al. (56)
- Application of ADWR-X radar in meteorological support over Mianyang airpor Zhang Wen, Wang Qin (59)
- A calibration equipment for temperature with air medium Zhang Yankun, Li Wei, Wang Chongzhe, et al. (65)
- Development and application of new aviation meteorological visibility target light Tao Jianguo, Chen Yubing, Lu Yubao (69)
- Design on air-conditioning terminal control unit of radar machine room Gong Xuepeng (72)
- Comparative analysis on rainfall observation by weighing sensor and manual method Guan Yeli, Yang Baohua, Li Qing (76)
- Design and implement of automation control technology for numerical prediction business Yin Jianping, Sun Qingguo, Li Wei, et al. (79)
- Application of the Markov chain in the forecast of annual precipitation Li Shaohui, Sun Xuejin (84)
- Methods and techniques on reading the meteorological data of regional AWS manually Huang Rui, Ren Weiyang, Lan Tanfei (87)
- Adjusting method of ADWR radar transmitter power Fan Dawei, Hu Zhongwen, Liu Jiang (91)
- Operation method and installation skill of dark-tube sunshine recorder Chen Qingliang, Sun Qingyi, Zhang Xiaoli (96)

Maintenance and Repair

- Working principle and typical fault analysis on negative air ion monitoring system for capacitive inhalation method Wu Yun (99)
- Fault analysis and solution of mobile X-band full coherent doppler weather radar excitation source Lian Ping, Liu Ying, Zhou Baocai, et al. (103)
- Installation maintenance and troubleshooting for FNP-2 solar net radiation meter Dong Haiying, Liu Guiying, Qiao Yuxing (107)
- Maintenance and calibration on forward scattering visibility meter Xu Jianping, Yuan Jing, Li Xiaoli, et al. (110)
- Daily operation and maintenance of ADTD lightning locator Huang Zhixing (112)
- A fault analysis and data processing of automatic station Li Xiaohong, Shao Yingquan, Li Saiming (114)

Summary

- Status and prospects of three-dimensional laser scan technique applied in maritime matters Lei Liyuan, Zhang Xiao, Xi Xiaohui, et al. (117)

(英文编辑:王明蕊)

气象水文海洋仪器

第 32 卷 第 2 期 (总第 114 期)

2015 年 6 月

目 次

研究与探讨

- 风廓线雷达平均噪声功率统计特征分析 周旭辉, 王建波, 王黎明, 等(1)
- 气象装备静态保障能力评估方法的研究 涂爱琴, 黄磊, 安忠亮, 等(5)
- 河北省太阳总辐射的气候学计算及分布特征 李翠娜, 秦世广, 吴建成 (10)
- PWD20 型前向散射能见度仪与人工观测数据差异分析 舒耿豪, 赵廷斌, 李丹 (14)
- 区域自动气象站小时雨量数据质量控制方法研究 姜明, 党岳, 李晓波, 等(18)
- 湿度仪示值误差测量结果的不确定度评定 邓卫勤 (24)
- 超检温湿度传感器观测数据分析研究 刘宝君, 冉建新, 宋志龙 (27)
- MSCTI 快速温度和电导率测量仪的定标方法研究 廖和琴, 张挺, 邹强, 等(30)
- 新一代天气雷达吊装技术方法和流程探讨 李宏图, 舒毅 (35)
- 考虑周围建(构)筑物影响时的雷电灾害风险评估参数计算方法的研究 冯鹤, 扈勇 (39)
- 开花期稻田上方温、风垂直分布及动力粗糙度特征研究 栾猛, 金锡灿, 申凤春, 等(44)

设计与应用

- 新疆天气过程个例信息化服务系统的设计与实现 杨柳, 刘孙俊, 汤浩 (50)
- GoogleMap 在海洋倾倒监视系统中的应用 齐勇, 苗斌, 张可可, 等(56)
- 绵阳机场 ADWR-X 雷达在气象保障中的应用 张雯, 王钦 (59)
- 一种空气介质式温度检定设备的设计 张艳昆, 李伟, 王崇哲, 等(65)
- 新型民航气象目标灯的开发与应用 陶建国, 陈育兵, 卢玉宝 (69)
- 雷达机房室内风机终端控制器的设计 龚雪鹏 (72)
- 称重与人工观测降水对比分析 管叶莉, 杨保华, 李青 (76)
- 数值预报业务流程自动化设计与实现 尹建平, 孙庆国, 李伟, 等(79)
- 马尔科夫链在年降水量预测中的应用 李绍辉, 孙学金 (84)
- 人工读取区域自动气象站存储数据的方法与技巧 黄锐, 任伟颖, 蓝天飞 (87)
- ADWR 雷达发射功率调整方法 范大伟, 胡忠文, 刘江 (91)
- 暗筒式日照计观测日照技巧 陈庆亮, 孙青仪, 张晓丽 (96)

维护与维修

- “电容式吸入法”空气负离子监测系统工作原理及典型故障分析 邬昀 (99)
- 移动 X 波段全相参多普勒天气雷达激励源故障分析及解决办法 连萍, 刘颖, 周宝才, 等(103)
- FNP-2 型太阳净全辐射表的安装维护及常见故障处理 董海英, 刘桂英, 乔玉新 (107)
- 前向散射能见度仪的维护和校准方法 徐剑平, 袁静, 李晓利, 等(110)
- ADTD 型闪电定位仪的日常使用和维护 黄志兴 (112)
- 自动站故障个例的分析和数据处理 黎晓红, 邵应泉, 利赛明 (114)

综述

- 三维激光扫描技术在海洋领域中的应用现状与前景展望 雷利元, 张笑, 席小慧, 等(117)

- 征稿简则 (4)

- ☆ 中国知网收录期刊
- ☆ 中国学术期刊（光盘版）收录期刊
- ☆ 中文科技期刊数据库收录期刊
- ☆ 万方数据库收录期刊
- ☆ 入选中国科协精品科技期刊示范项目

气象水文海洋仪器

Qixiang Shuiwen Haiyang Yiqi

季刊 1984年创刊

第32卷第2期（总114期）

2015年6月

Meteorological, Hydrological and Marine Instruments

Quarterly, started in 1984

Vol.32 No.2 (Sum 114)

June 2015

主管单位：中国科学技术协会
 主办单位：中国仪器仪表学会
 气象水文海洋仪器分会
 长春气象仪器研究所
 主 编：王启万
 主 任：吴 展
 副主编：吴 展 赵玉兰
 出版发行：《气象水文海洋仪器》编辑部
 地 址：长春市前进大街1号 130012
 电 话：0431-85515135
 传 真：0431-85519671
 E-mail：qxswwhybjb@sina.com
 网 址：www.qxswwhy.com
 印 刷：长春市现代印务有限公司

Superintended by: China Science Technology Association
 Sponsored by: Meteorological, Hydrological and
 Marine Instruments Branch of China
 Instrumentation Institute,
 Changchun Meteorological
 Instrument Research Institute
 Editor-in-Chief: Wang Qiwan
 Director: Wu Zhan
 Associate Editor: Wu Zhan Zhao Yulan
 Published by: Editorial Board of Meteorological,
 Hydrological and Marine Instruments
 Add: 1 Qianjin Street, Changchun 130012, China
 Tel: 0431-85515135
 Fax: 0431-85519671
 E-mail: qxswwhybjb@sina.com
 http: //www.qxswwhy.com
 Printed by: Changchun Xiandai Printing Business
 Limited Company

中国标准连续出版物号 ISSN1006-009X
 CN22-1135/TH

邮发代码 12-395

定价 $\frac{25.00\text{元/期}}{100.00\text{元/年}}$