



KTS-462R8MC

800米免棱镜测程彩屏全站仪

不露声色，
已露锋芒

800米免棱镜：

免棱镜测程高达800米，高效率、高测程，有效地解决了对不可直视棱镜的待测点测量；

彩屏操作：

3.5英寸高亮真彩显示屏，清晰操作，应时而生，为您带来前所未有的操作体验；

温度气压自动改正系统：

采用温度气压传感器，无需输入参数，自动改正；

激光指向：

具备激光指向功能，更方便寻找目标；

激光下对点：

采用可见激光光束，在光线不足的情况下可凭可视激光对中，提高工作效率。

KOLIDA[®]
科力达

地址：广州市天河区科韵路24号2楼
网址：www.kolida.com.cn

电话：020-22131700 传真：020-22131709
邮箱：kolida@163.com

主管：黑龙江测绘地理信息局

主办：黑龙江省测绘学会

出版：《测绘与空间地理信息》编辑部

协办：黑龙江省地理信息产业园

(其他协办单位详见内文)

中国科技核心期刊 全国优秀测绘期刊

《中国核心期刊（遴选）数据库》收录期刊

中国学术期刊综合评价数据库统计源期刊

《CAJ-CD规范》执行优秀期刊

中国期刊全文数据库全文收录期刊

测
绘
与
空
间
地
理
信
息

2013 2
(月刊)
Vol.36 No.2

祝贺本刊跻身于全国大型科技月刊行列

万方数据

目 次

2013年第2期(总第36卷 第166期)

博士园地

- 基于网络的航摄底片数据库系统的研究与建立
.....王明孝,翟辉琴,张国辉(1)
基于GIS的城市空间结构研究进展
.....康停军(3)
核心词汇折射中国测绘地理信息发展方向标——从国家及各地区“十二五”《纲要》看中国测绘地理信息的发展脉络
.....桂德竹,徐坤,刘芳(7)
室内地图设计现状分析
.....齐晓飞,崔秀飞,李怀树(10)
空间信息服务管理机制研究梁娟珠(15)
基于ArcGIS Server和Flex的校园能源监管地理信息系统
.....张旭东,刘善伟,刘馨泽,等(19)
基于六角格的陆地边界环境模型构建方法研究
.....武丽丽,华一新,徐青(22)
ALI遥感数据的岩矿反射率反演方法研究
.....刘汉湖,杨武年,杨容浩(27)
GIS专业“空间数据库”课程教学内容和方法探讨
.....杨勇(31)

基金项目专栏

- 基于SuperMap的区县矿产资源规划数据库系统研究
.....施峰,王宏图,代纪元,等(34)
城郊地区面向对象的多传感器影像分类
.....刘瑞,陈小涛(37)
基于ORACLE和Arcsde的SAR影像库系统构建
.....石雪冬,周霁进(42)
基于GIS的重大动物疫情应急指挥平台建设研究
.....向煜,韩熙,颜春波(46)
ZY-1 02C卫星影像融合方法评价
.....陈雪洋,袁超(50)

- 基于ArcEngine的新疆气温栅格化系统设计与实现
.....陈鹏翔,白素琴(54)
基于GIS的海洋渔业应急救援系统建设研究
.....魏延亮,张建辉(56)
基于GPS和MODIS数据的大气可降水量反演算法研究
.....张俊东,陈秀万,李颖,等(59)
基于GIS和分形的云南省富宁县交通网络研究
.....丁贤法(63)
非量测数码相机内方位元素测量研究
.....喻忠伟,王金鑫(67)

3S技术与应用

- 基于机载LIDAR技术的研究及其展望
.....郭向前,郝伟涛,李响(69)
基于ArcGIS二次开发的数据库检查技术实现
.....陈合忠(73)
GPS起算点中粗差定位的研究
.....梁武南(75)
天津市建筑市场监管GIS应用中的关键技术研究
.....刘小飞,关昆(78)
基于ArcGIS的矿山资源遥感监测符号库的建立
.....洪洲(81)
“数字丽水”地理空间框架建设主要成果与技术创新
.....钟春惺,江丽钧,朱建丰,等(85)
基于全景技术的场景漫游的设计与实现
.....何琳(88)
地面3维激光扫描技术在古建筑保护中的应用研究
.....尹玉廷(91)
规划管理信息系统中CAD集成应用研究
.....章志佳,钟文军(94)
遥感技术在森林防火中应用的研究
.....郭志佳,曲鑫(96)

- 浅谈哈尔滨市群力新区地理信息系统建设 孙大龙, 刘娟(99)
- GPS定位技术在新粤浙管道穿越长江中的应用 李令伟(101)
- 工商巡查管理信息系统的技术与实现 侯岳, 朱琦(103)
- 基于ArcGIS的规划成果信息符号库的创建探讨 张艳华, 孙大龙(106)
- WebGIS的主要构造模型评价 王春林, 黄墨燃(109)
- 3S技术在第二次全国土地调查中的应用 刘旭, 蔡四辈(111)
- 基于服务式GIS的放射源监控管理平台建设研究 吕楠, 向煜, 李菲(115)
- 外军遥感测绘卫星现状与趋势研究 何骏, 赵远方(118)
- 数字城市中3维城市模型构建技术研究 吴志宜(121)
- 3DSMAX在虚拟现实中的应用 黄静, 张红忠(124)
- GPS/VRS对流层延迟误差内插模型研究 谢建涛, 郝金明, 邱璇, 等(127)
- 基于GSM Modem及GIS技术的地质灾害预警系统研究 朱以洲, 李永树, 吴晔晖, 等(130)
- 地理信息系统为城市经济建设提供服务保障 张悦(133)
- 基于ArcGIS空间建模的矿区土地复垦费用计算 余地, 李卫祥, 严伟才, 等(136)
- 测绘工程**
- 利用AI进行电子地图制作的技术探讨与应用 王晓辉, 王铮, 冉慧(139)
- 陕西省某钼矿区矿山地质环境动态变化研究 杨宇鸿(142)
- 参心独立坐标系向地心独立坐标系转换地块面积变化分析和计算方法研究 韩买侠, 王小华, 王夏莉, 等(145)
- 基于CAD平台开发的实现3DSMAX快速建模方法研究 赵永兰, 何耀帮(148)
- 基于CORS系统的基础控制测量示范应用 张爱娟, 宋会传(150)
- 浅析扫描地形图纠正方法与常用地图纠正软件的使用 贾丽萍(152)
- AGT-1全自动陀螺经纬仪在地铁建设中的应用及精度分析 叶亚林(154)
- 精密水准测量中重力改正的归算 顾贊(157)
- DiNi03数字水准仪的PDA外业数据采集系统的设计及实现 易天阳(159)
- 海河基线检测场建设及观测墩施工放样方法 卢双印, 程增杰(163)
- 建设工程竣工测绘技术规程之探讨 刘娟, 郝建新(165)
- 基于冰冻河流的水下测量方法 蔡洪新, 侯雪峰(168)
- 南方CASS简码法在数字化测图内外业一体化中的应用 陈冬晖, 张忠坤(170)
- 精密三角高程在武咸城际铁路二等水准测量中的应用分析 石雪强, 程新文, 杨翠莲(173)
- 基于Microstation的专题地图编辑与出版 王磊, 续玉萍, 严薇(176)
- 浅述DOM的制作方法及应用 郝娜, 于鲁琪, 吕静凡(179)
- 地形图综合缩编与数据入库——以增城市1:5 000地形图数据为例 冯连好, 史经(181)
- 基于PSO和LM算法的坐标转换新方法 郑建雷, 黄张裕, 邱华旭, 等(183)
- 测绘管理与质量**
- 对加强测量项目质量管理与监测的思考与探索 何川(187)
- 浅谈测绘项目招标工作中评标方法择取 黄志行, 赖贊康, 周朝生, 等(190)

CONTENTS

Feb. 2013 Vol.36 No.2 (Serial No.166)

博士园地

- Web Based Air Photo Database System Research and Establishment WANG Ming-xiao, ZHAI Hui-qin, ZHANG Guo-hui(1)
Research Progress of Urban Spatial Structure Based on Geographical Information System KANG Ting-jun(3)
The Core Vocabulary of Refraction Mapping Geographic Information Development Direction in China:
From National and Regional "Twelfth Five" "Outline" See China Surveying and Mapping Geographic Information Development GUI De-zhu, XU Kun, LIU Fang(7)
Analysis of Design on Indoor Map QI Xiao-fei, CUI Xiu-fei, LI Huai-shu(10)
Research on Spatial Information Service Management Mechanism System LIANG Juan-zhu(15)
Campus Energy Monitoring Geographic Information System Based on ArcGIS Server and Flex ZHANG Xu-dong, LIU Shan-wei, LIU Xin-ze, etc.(19)
Study on Hexagon-Based Land Boundary Environment Model WU Li-li, HUA Yi-xin, XU Qing(22)
The Research on Reflectance Retrieval Method of ALI Remote Sensing Data LIU Han-hu, YANG Wu-nian, YANG Rong-hao(27)
Research on Spatial Database Education for Undergraduate Student of GIS Specialty YANG Yong(31)

基金项目专栏

- Research on Database System of County Mineral Resource Planning and Management Based on SuperMap SHI Feng, WANG Hong-tu, DAI Ji-yuan, etc.(34)
Object Oriented Multi-Sensor Image Classification for Peri-Urban Areas LIU Rui, CHEN Xiao-tao(37)
Construction of SAR Image Library System Based on ORACLE and Arcsde SHI Xue-dong, ZHOU Ji-jin(42)
Research on Construction of Major Animal Epidemic Emergency Command Platform Based on GIS XIANG Yu, HAN Xi, YAN Chun-bo(46)
Data Fusion Evaluation of ZY-1 02C Satellite Images CHEN Xue-yang, YUAN Chao(50)
Design and Realize of ArcEngine-Based Air Temperature Spatialization System in Xinjiang CHEN Peng-xiang, BAI Su-qin(54)

Research of Construction of Ocean Finish Emergency Rescue System Based on the GIS WEI Yan-liang, ZHANG Jian-hui(56)

- Research on Retrieval Algorithm of Atmospheric Precipitable Water Vapor Based on GPS and MODIS Data ZHANG Jun-dong, CHEN Xiu-wan, LI Ying, etc.(59)
Study on the Road Network of Funing County, Yunan Province Based on GIS and Fractal theory DING Xian-fa(63)
Measurement Research of Non-Metric Digital Camera Orientation Elements YU Zhong-wei, WANG Jin-xin(67)

3S 技术与应用

- Based on the Airborne LIDAR Technology Research and its Prospect GUO Xiang-qian, HAO Wei-tao, LI Xiang(69)
The Technique Realization of Based on ArcGIS Secondary Development on Database Check CHEN He-zhong(73)
The Searching of the Fixed Error Point in the GPS Network LIANG Wu-nan(75)
Research on Key Technologies of GIS Application in Tianjin Construction Market Regulation LIU Xiao-fei, GUAN Kun(78)
Symbol Library Establishment of Mine Resource Remote Sensing Monitoring Based on ArcGIS HONG Zhou(81)
Major Achievements and Technological Innovation in the Construction for "Digital Lishui" Geospatial Framework ZHONG Chun-xing, JIANG Li-jun, ZHU Jian-feng, etc.(85)
Design and Implementation of Scene Roaming Based on Panoramic Technology HE Lin(88)
Application Research of Terrestrial 3D Laser Scanning Technology in Architectural Heritages YIN Yu-ting(91)
Study on the Integration of CAD in Urban Planning Management Information System ZHANG Zhi-jia, ZHONG Wen-jun(94)
Research on the Application of Remote Sensing Technique in Forest Fire Prevention GUO Zhi-jia, QU Xin(96)
A Brief Discussion on Geographic Information System Construction of Harbin City Qunli District SUN Da-long, LIU Juan(99)
Application of GPS Locationning in XinYueZhe Pipeline Crossing Yangtse River LI Ling-wei(101)

GEOMATICS & SPATIAL INFORMATION TECHNOLOGY

| | |
|--|---|
| Study on the Technology and Implementation of Industrial and Commercial Inspection Management Information System HOU Yue, ZHU Qi(103) | Demonstration Application Based on the Basis of the CORS System Control Measurements ZHANG Ai-juan, SONG Hui-chuan(150) |
| Discussion on Establishment of the Symbol Library for Result Information Planning Based on ArcGIS ZHANG Yan-hua, SUN Da-long(106) | Analysis of the Rectifying Method of Scanned Topographic Maps and Map Correction Software Use JIA Li-ping(152) |
| Evaluation on Main Structural Model About WebGIS WANG Chun-lin, HUANG Mo-ran(109) | The Application of Automatic Gyro - Theodolite in Subway Construction and Precision Analysis YE Ya-lin(154) |
| 3S Technology Application in the Second National Land Survey LIU Xu, CAI Si-bei(111) | Gravity Correction in Precise Leveling Calculation GU Yun(157) |
| Research on the Construction of Radiated Sources Information Management Platform Based on Service GIS LV Nan, XIANG Yu, LI Fei(115) | Design and Implementation of Field Data Acquisition System on PDA for DiNi03 YI Tian-yang(159) |
| Research on Status and Trends of Military Power in Remote Sensing Mapping Satellite HE Jun, ZHAO Yuan-fang(118) | Study on Construction of Haihe Baseline Detection Filed and Method of Plane Lofting and Layout LU Shuang-yin, CHENG Zeng-jie(163) |
| Research on Digital City 3D City Model Building Technology WU Zhi-yi(121) | Discussion On the Construction Project Completion of Technical Specification for Surveying and Mapping LIU Juan, HAO Jian-xin(165) |
| Application of 3DSMAX in Virtual Reality HUANG Jing, ZHANG Hong-zhong(124) | Based on the Frozen River Measurement Method under the Water CAI Hong-xin, HOU Xue-feng(168) |
| Research on Linear Interpolation Model of GPS/VRS Troposphere Delay Error XIE Jian-tao, HAO Jin-ming, QIU Xuan, etc.(127) | Application of Simple Code Method in Inside and Outside Field Digital Mapping Integration CHEN Dong-hui, ZHANG Zhong-kun(170) |
| Studies on the Geological Disasters Alert System Based on GSM Modem and GIS Technology ZHU Yi-zhou, LI Yong-shu, WU Ye-hui, etc.(130) | The Application of Precision Triangle Elevation in Second - Order Leveling Survey of Wuhan-Xianning Intercity Railway SHI Xue-qiang, CHENG Xin-wen, YANG Cui-lian(173) |
| Geographic Information System for City Economy Construction Provides Security Services ZHANG Yue(133) | The Edi ting and Publication of Thematic Maps Based on Microstation WANG Lei, XU Yu-ping, YAN Wei(176) |
| Computation of Mine Land Reclamation Cost Based on ArcGIS with Spatial Modeling YU Di, LI Wei-xiang, YAN Wei-cai, etc.(136) | Production Method and Application of DOM HAO Na, YU Lu-qi, LV Jing-fan(179) |
| 测绘工程 | Topographic Map Generalization and Data Storage: Taking the City of Zengcheng in 1:5 000 Topographic Map Data as an Example FENG Lian-hao, SHI Jing(181) |
| Discussion and Application on Electronic Map Production Based on AI WANG Xiao-hui, WANG Zheng, RAN Hui(139) | A New Method of Coordinate Transformation Based on PSO and LM |
| Research on Dynamic Change of Molybdenum Mine Geological Environment in Shaanxi Province YANG Yu-hong(142) | ZHENG Jian-lei, HUANG Zhang-yu, QIU Hua-xu, etc.(183) |
| Land Area Changing Analysis and Arithmetic Research on Co-ordinate Transformation from Independent Reference Ellipsoid Centric Coordinate System to Independent Geocentric Coordinate System | 测绘管理与质量 |
| HAN Mai-xia, WANG Xiao-hua, WANG Xia-li, etc.(145) | To Strengthen the Project Quality Management and Monitoring Measurement of Reflection and Exploration HE Chuan(187) |
| Reserch on Method for Quickly Build Model by Use 3DSMAX Based on CAD System Platform ZHAO Yong-lan, HE Yao-bang(148) | Selection of Evaluation Methods for Bidding and Tendering of Surveying and Mapping Projects |
| | HUANG Zhi-xing, LAI Yun-kang, ZHOU Chao-sheng, etc.(190) |