^{基础类成果} 中国水文图集

【创新性】

建国初期水文资料序列短、覆盖面不够,存在大 量的缺资料、少资料地区,不足以支撑大规模的水利 工程建设。为解决该问题,在中国雨量径流图表、中 国暴雨参数图集和部分省(区)的水文手册的基础上 编制而成《中国水文图集》。在勾绘等值线时,除参 照各站统计数据外,又考虑了地形、地质、土壤、植 被等自然地理因素的影响,力求等值线的分布符合实 际情况。在各图之间,也根据各项水文要素的内在联 系,进行了必要的对照和协调。对观测年数不等的资 料,进行系列的平衡工作,使各站的统计特征值,具 有比较一致的基础,并尽量代表长时期的平均情况。 搜集了截至 1958 年底的水文系统和气象系统的全部 有关项目的观测整编成果,并加以挑选和鉴别,以去 粗取精。

【影响力】

《中国水文图集》是我国首部全国全域范围的 水文图集;因系统性强、勾绘思路科学,编制至今尚 无其他成果能够完全替代。《中国水文图集》解决了 建国初期大规模水利工程建设需求与缺资料、少资料 的矛盾,支撑了我国水利工程设计与建设40余年, 成为水利设计工作人员的案头必备材料。用于1963 年后40余年共几万座水利工程的设计暴雨、设计洪 水推算,支撑了缺资料、少资料地区大规模的水利工 程建设,为新中国的稳定和发展做出了杰出的贡献。

主要完成人:陈志恺、叶永毅、谢家泽、阚贵生、周光甫 曹韻霞、顾文燕、韩曼华、乐嘉祥 受奖单位:水资源所





CHINA HYDROLOGIC ATLAS

[Innovation]

Many regions lack hydrologic data owning to short sequences and insufficient coverage in the early days of New China, making them unable to support the large-scale construction of water conservancy projects. To solve this problem, the China Hydrologic Atlas was compiled based on the China rainfall runoff charts, China rainstorm parameter atlas and hydrologic handbooks of some provinces (regions). In addition to referring to statistical data from various stations, the drawing of contours has taken the influence of physiographic factors, such as landform, geology, soil, plantation, etc., into consideration, so as to make the distribution of contours conform to the actual situation. The work has conducted necessary comparisons and coordination between different maps according to the inner connection of various hydrologic elements. It has also carried out a series of balancing work for data with different years of observation, in an effort to provide the consistent basis for the characteristic values of various stations, and represent the average status in the long run as much as possible. The achievements of all projects relating to the hydrological and meteorological systems ended by 1958 have been collected, selected, distinguished and carefully chosen.

[Influence]

The China Hydrologic Atlas is the first of its kind in China within the domain–wide scope, and has never been completely replaced by other achievements so far since its compilation thanks to its strong systematic features and scientific thinking of drawing. The publication has resolved the contradiction between the demand for the large–scale construction of water conservancy projects and the lack of data in the beginning of New China, propped up the design and construction of water conservancy projects for nearly 40 years in China, making it must–have material for hydraulic engineering designers. It has been used to estimate the rainstorm and flood design for tens of thousands of water conservancy projects in data–insufficient regions, thus making outstanding contributions to the stability and development of New China.

Main Contributor : Chen Zhikai, Ye Yongyi, Xie Jiaze, Kan Guisheng, Zhou Guangfu Cao Yunxia, Gu Wenyan, Han Manhua, Yue Jiaxiang Award-winning Unit : Department of Water Resources