

流域集水區屬性與水文氣象資料集建立

Catchment Attributes and hydro-Meteorological timeseries dataset in Taiwan

沈志全¹ (Shen J.-C.) 黃冠智¹ (Huang K.-C.) 張哲豪² (Chang C.-H.) 吳一平³ (Wu E.-P.)

¹方圖科技股份有限公司 ²國立台北科技大學 經濟部水利署

¹FondUS Technology Co., Ltd.

²National Taipei University of Technology

³Water Resources Agency

摘 要

水文氣象監測資料是國家重要的環境監測資訊，隨著不同觀測技術與觀測資料持續發展，如何有效提供給使用這方便查詢使用的資料內容與分析資訊，一直是世界各國水文單位重要的工作項目與任務。而隨著資料內容越來越多，資訊分散在不同領域與單位。在資料查詢與分析過程中，需要花費大量人力與精神進行資料收集與前處理之程序才能展開流域資料分析的程序。為了有效提供使用者公開且方便查詢與使用的資料集。可方便各種不同領域的使用者，依照需的項目與內容進行模式開發與分析工作。因此嘗試參考美國、英國、澳洲、智利等國家目前建立流域集水區水文氣象資料集CAMELS (Catchment Attributes and MEteorology for Large-sample Studies) 成果。提供國內後續相關單位使用與分析使用。由於資料廣泛，因此在水文氣象資料優先針對降雨量、溫度、流量等資訊優先建立。而在集水區屬性資料內容中優先針對土地利用、土壤、地質、地形等資訊進行建立。並且逐步擴充資料長度與集水區屬性的完整性。以提供後續相關單位分析與應用。

關鍵字：流域集水區、水文氣象資料集、水文、地文

Abstract

Hydro-meteorological monitoring data are important environmental monitoring information. Different observation technologies and observation data applications continue to develop, and how to effectively provide the data content and analysis information that are convenient for use is an important work item and task of hydrological management departments in all countries in the world. With more and more data content, information is scattered in different fields and units. In the process of data collection and analysis, it takes more time for the data collection and pre-processing procedures to start the data analysis process. In order to effectively provide a public and convenient data collection. For users in different fields, model development and analysis can be carried out according to the required items and content.

Therefore, try to refer to the United States, the United Kingdom, Australia, Chile and other countries currently establishing hydro-meteorological time series and catchment attributes dataset CAMELS (Catchment Attributes and MEteorology for Large-sample Studies). To provide the hydro-meteorological variables including rainfall, temperature, and river streamflow. The catchment attributes are including topography, land cover, soils. And gradually expand the data time and the integrity of catchment attributes. To provide analysis and application of relevant units.

Key words: Catchment Attributes, Hydro-Meteorological, Dataset, CAMELS