

The Content Design and Representation for Atlas of Typical Landform in Western China

Hongmei Yin and Ronghua Yu

Chinese Academy of Surveying and Mapping, Beijing, China (yinhm@casm.ac.cn)

The Atlas of Typical Landform in Western China is a regional thematic atlas, the subject content of which is to represent topography characteristics in western China. There are 126 typical geomorphic points which are shown in multi-perspective and multi-expression methods. The landform classification system is comprehensive and scientific ,and the selected points are typical.

According to contributing factors to the formation of landform, the contents are classified into ten categories including introductory maps, structural landform, fluvial and lacustrine landform, glacial landform, aeolian landform, loess landform, karst landform, gravity landform, and man-made landform. Several to dozens of typical geomorphic points are selected from each category to show their morphological characteristics.

In order to display geomorphological information in three-dimensional space as vividly as possible in twodimensional plane for each typical points, both scientific and artistic features are taken into account. Appropriate expression methods are adopted according to the characteristics of various types of landforms. The contour of topographic maps and images with high-resolution are the main representation method used in the atlas. In addition, to make sure the characteristics of each type of landforms are represented scientifically and visually vividly, other representation methods are used , including hill-shade maps, stereo maps with three-dimensions, topographic profile maps and scientific block maps and so on.

It is expected that readers can better appreciate the beautiful scenery in western China while learning professional knowledge.