©2026 GCdataPR
Global Change Research Data Publishing & Repository

Spatial Distribution Dataset Development of 244 Scenic and Historic Areas in China

JIANG Yujin[1, 2] YANG Meng[3] HE Ju[4] LU Yanxu[5] LIU Yuping[3] YE Peng[3*]

1. Zhejiang Academy of Culture and Tourism Development, Hangzhou 311231, China;
2. School of Applied Digital Technology, Tourism College of Zhejiang, Hangzhou 311231, China;
3. College of Civil Engineering and Transportation, Yangzhou University, Yangzhou 225127, China;
4. Institute for Rural Revitalization Strategy, Yangzhou University, Yangzhou 225009, China;
5. Key Laboratory of Virtual Geographic Environment, Nanjing Normal University, Ministry of Education, Nanjing 210023, China

Abstract: Scenic spots are the most distinctive type of natural protected areas in China, not only carrying the functions of protecting natural and cultural heritage, but also playing a significant role in optimizing urban and rural living environments, ensuring regional ecological security, inheriting excellent Chinese culture, enhancing public identification with the country, and meeting the spiritual and cultural needs of the masses. Based on the 244 national-level scenic spots lists released by the State Council nine times in 1982, 1988, 1994, 2002, 2004, 2005, 2009, 2012, and 2017, the author extracted the geographical coordinates of each key cultural relic protection unit using the Baidu Map service interface and verified the data based on Google Earth, obtaining a spatial distribution dataset of China's national-level scenic spots. The dataset includes information such as the name, type, batch, and zoning of each national-level scenic spot. The dataset is archived in .shp and .xlsx formats, and consists of 7 data files with data size of 989 KB (compressed into one single file with 78.5 KB).

Keywords: Scenic and Historic Areas; national level; national park; spatial distribution; China

DOI: https://doi.org/10.3974/geodp.2026.04.08

Dataset Availability Statement:

The dataset supporting this paper was published and is accessible through the *Digital Journal of Global Change Data Repository* at: https://doi.org/10.3974/geodb.2025.05.02.V1.

1 Introduction

In order to more effectively maintain important ecosystems and promote the long-term preservation and rational utilization of natural ecological heritage and natural cultural heritage based on authenticity and integrity, China has been continuously promoting the construction of the national park system in recent years. In 2013, China explicitly proposed

Received: 19-06-2025; **Accepted:** 03-07-2026; **Published:** 25-08-2026

Foundations: Zhejiang Province (2025C25025); Yangzhou University (xjj2021-08); Yangzhou City (2024YZD-005)

***Corresponding Author:** Ye, P., College of Civil Engineering and Transportation, Yangzhou University, 007839@yzu.edu.cn

Data Citation: [1] Jiang, Y. J., Yang, M., He, J., *et al*. Spatial distribution dataset development of 244 Scenic and Historic Areas in China [J]. *Journal of Global Change Data & Discovery*, 2026, 10(4): 462–469. https://doi.org/10.3974/geodp.2026.04.08.

[2] Jiang, Y. J., Yang, M., He, J., *et al*. Spatial distribution dataset of 244 Scenic and Historic Areas in nine batches of China [J/DB/OL]. *Digital Journal of Global Change Data Repository*, 2025. https://doi.org/10.3974/geodb.2025.05.02.V1.

the establishment of a national park system for the first time at the national level. Subsequently, the Integrated reform plan for promoting ecological progress, issued in 2015, and scientifically delineate national park boundaries on this basis. By 2022, the National Forestry and Grassland Administration, issued the Spatial layout plan for national parks, setting the goal of fundamentally establishing the national park system by 2035[1].

The International Union for Conservation of Nature (IUCN) generally defines national parks as large-scale natural or near-natural areas; consequently, national parks are incorporated into the overarching category of protected areas[2]. Meanwhile, according to China's Regulations on Scenic and Historic Areas, regions that possess aesthetic, cultural, or scientific values, feature concentrated distributions of natural and cultural landscapes, maintain favorable environmental conditions, and have sufficient scale to accommodate tourism, recreation, alongside scientific and cultural activities, can be legally designated as Scenic and Historic Areas[3]. Consequently, Scenic and Historic Areas and national parks are not disjointed in their connotations; rather, they share strong commonalities in resource conservation and public service. For this reason, within the current protected area system, which takes national parks as the mainstay and nature reserves as the foundation, the functional positioning of Scenic and Historic Areas under the national park framework is drawing increasing attention.

Scenic and Historic Areas represent a distinctly indigenous category of protected areas in China, with their institutional origins tracing back to 1982, when the national management system for these areas was formally established. As natural and cultural heritage conservation zones legally designated by the state, they rely primarily on natural landscape resources while carrying profound cultural accumulation, exhibiting an intertwining of natural elements and cultural connotations. They undertake multiple functions, including ecological conservation, cultural continuation, aesthetic education, scientific research, tourism and recreation, and driving regional development, thus possessing immense ecological, scientific, cultural, and aesthetic values[4]. Embodying the cumulative outcomes of prolonged natural evolution and historical-cultural accumulation, these areas serve as vital spaces for observing natural and cultural history, while also exemplifying the harmonious coexistence between humanity and nature. Over 40 years of continuous development, they have played an exceptionally prominent role in conserving natural and cultural heritage, optimizing urban and rural living environments, safeguarding ecological security, preserving and transmitting fine Chinese culture, fostering the public's patriotic sentiment, and enriching the cultural lives of the people[5].

National-level Scenic and Historic Areas are typically regions characterized by the most concentrated scenic resources and the most outstanding heritage values. In practice, they have naturally become primary targets for intensive government investment, sustained academic focus, and dense public visitation[6]. This dataset provides spatial distribution data for 244 national-level Scenic and Historic Areas across 9 batches established over the four decades since the inception of the system. The data content encompasses foundational information such as announcement batches, typological classifications, and corresponding administrative divisions, thereby offering a robust data foundation for analyzing the spatio-temporal distribution patterns of national-level Scenic and Historic Areas. From a spatio-temporal perspective, the dataset also seeks to substantiate the status of China's Scenic and Historic Areas as a crucial type of protected area. Ultimately, it aims to provide valuable references for the selection of national parks in the new era, the functional repositioning and typological optimization of Scenic and Historic Areas, as well as the implementation of customized, zoning-based management policies.

2 Metadata of Dataset

The metadata of the Spatial distribution dataset of 244 Scenic and Historic Areas in nine batches of China[7] is summarized in Table 1. It includes the dataset full name, short name, authors, year of the dataset, temporal resolution, spatial resolution, data format, data size, data files, data publisher, and data sharing policy, etc.

Table 1 Metadata summary of the Spatial distribution dataset of 244 Scenic and Historic Areas in nine batches of China

Items	Description
Dataset full name	Spatial distribution dataset of 244 Scenic and Historic Areas in nine batches of China
Dataset short name	NationalPark_China_1982-2017
Authors	Jiang, Y. J., Zhejiang Academy of Culture and Tourism Development; School of Applied Digital Technology, Tourism College of Zhejiang, jiangyujin@tourzj.edu.cn Yang, M., College of Civil Engineering and Transportation, Yangzhou University, emyangmeng@163.com He, J., Institute for Rural Revitalization Strategy, Yangzhou University, torchheju@163.com Lu, Y. X., Key Laboratory of Virtual Geographic Environment, Nanjing Normal University, Ministry of Education, 191301019@njnu.edu.cn Liu, Y. P., College of Civil Engineering and Transportation, Yangzhou University, 006958@yzu.edu.cn Ye, P., College of Civil Engineering and Transportation, Yangzhou University, 007839@yzu.edu.cn
Geographical region	China, covering 31 provincial-level administrative regions (excluding data for Hong Kong, Macau, and Taiwan)
Year	1982–2017
Temporal resolution	Year
Spatial resolution	County
Data format	.shp, .xlsx
Data size	989 KB
Data files	The name, type, batch, administrative division, and other information of each national scenic spot
Foundations	Zhejiang Province (2025C25025); Yangzhou University (xjj2021-08); Yangzhou City (2024YZD-005)
Data computing environment	ArcGIS 10.2
Data publisher	Global Change Research Data Publishing & Repository, http://www.geodoi.ac.cn
Address	No. 11A, Datun Road, Chaoyang District, Beijing 100101, China
Data sharing policy	(1) *Data* are openly available and can be free downloaded via the Internet; (2) End users are encouraged to use *Data* subject to citation; (3) Users, who are by definition also value-added service providers, are welcome to redistribute *Data* subject to written permission from the GCdataPR Editorial Office and the issuance of a *Data* redistribution license; and (4) If *Data* are used to compile new datasets, the "ten percent principle" should be followed such that *Data* records utilized should not surpass 10% of the new dataset contents, while sources should be clearly noted in suitable places in the new dataset[8]
Communication and searchable system	DOI, CSTR, Crossref, DCI, CSCD, CNKI, SciEngine, WDS, GEOSS, PubScholar, CKRSC, OARL

3 Methods

A comprehensive collection of the 9 batches of Scenic and Historic Areas of China designated between 1982 and 2017 was conducted. These parks were classified in accordance with the Classification criteria for Scenic and Historic Areas (CJJ/T 121—2008)[9] and the 2017 Draft classification criteria for Scenic and Historic Areas (provisional)[10]. The geocoding services provided by web mapping platforms were utilized to extract administrative information and spatial coordinates for each Scenic and Historic Area of China, followed by the supplementation of relevant attribute data, and the ArcGIS platform

was subsequently employed to achieve the spatial representation and visualization of these locations, which ultimately led to the construction of the spatial distribution dataset for the Scenic and Historic Areas of China.

3.1 Data Sources

The list of Scenic and Historic Areas of China was compiled from official notices published on the Chinese Government Portal. Details of these notices, including titles and release dates, are summarized in Table 2.

Table 2 Official notices designating Scenic and Historic Areas of China

Batch	Official notice title	Release date	Number
1	Notice of the State Council on approving and transmitting the request for reviewing the first batch of Scenic and Historic Areas of China	Nov. 8, 1982	44
2	Notice of the State Council on approving and transmitting the report for reviewing the second batch of Scenic and Historic Areas of China	Aug. 1, 1988	40
3	Notice of the State Council on publishing the third batch of Scenic and Historic Areas of China	Jan. 10, 1994	35
4	Notice of the State Council on publishing the fourth batch of Scenic and Historic Areas of China	May 17, 2002	32
5	Notice of the State Council on publishing the fifth batch of Scenic and Historic Areas of China	Jan. 13, 2004	26
6	Notice of the State Council on publishing the sixth batch of Scenic and Historic Areas of China	Dec. 31, 2005	10
7	Notice of the State Council on publishing the seventh batch of Scenic and Historic Areas of China	Dec. 28, 2009	21
8	Notice of the State Council on publishing the eighth batch of Scenic and Historic Areas of China	Oct. 31, 2012	17
9	Notice of the State Council on publishing the ninth batch of Scenic and Historic Areas of China	Mar. 21, 2017	19

The official names of Scenic and Historic Areas of China correspond to those specified in the respective notices. For instance, the Wuyang River (“濈阳河”) Scenic and Historic Area of China (also locally referred to as Wuyanghe (“濮阳河”) or Wuyanghe (“舞阳河”)) exemplifies regional naming variations. Additionally, the official notices for national-level Scenic and Historic Areas only include the names of the designated areas and their provincial administrative divisions, with the provincial classification based on the historical administrative boundaries at the time of their announcement. Furthermore, due to limitations in data availability, data for the Hong Kong, Macao, and Taiwan regions are not included in the current statistical scope.

3.2 Data Processing

(1) Geocoding

Given that the officially released directories of national-level Scenic and Historic Areas typically lack explicit latitude and longitude data, the names of the areas alongside their corresponding provincial administrative divisions were utilized as query criteria. Specifically, the Baidu Maps Place API was invoked to conduct geocoding and extract the relevant spatial coordinates. Upon obtaining the initial results, a coordinate conversion tool was applied to convert the BD09 coordinate system used by Baidu Maps into the China Geodetic Coordinate System 2000 (CGCS2000), thereby ensuring consistency for standar-

dized data consolidation and subsequent spatial analysis.

(2) Administrative division supplementation

While the initially published directories of national-level Scenic and Historic Areas included provincial administrative division information, the designation of these batches spans a prolonged timeframe. Consequently, the original administrative affiliations and corresponding spatial extents of certain areas have shifted alongside subsequent administrative division adjustments. Driven by the necessity for data currency and the requirements of downstream spatial analysis, the Baidu Maps Global Reverse Geocoding API was additionally employed. Based on their respective geographic coordinates, the current and up-to-date administrative jurisdictions of all national-level Scenic and Historic Areas were systematically identified and updated.

(3) Division the category for Scenic and Historic Areas

The Classification criteria for Scenic and Historic Areas (CJJ/T 121—2008), an industry standard issued by the Ministry of Housing and Urban-Rural Development of China, categorizes Scenic and Historic Areas of China into 14 classes based on core attributes: historical sacred sites, mountain landscapes, karst caves & rock formations, rivers & waterways, lakes & wetlands, coastal & island sceneries, unique geological landforms, urban landscapes, biodiversity & ecological reserves, mural & grotto heritage, memorial & historical sites, imperial tombs & mausoleums, ethnic & folk cultural landscapes, Other categories.

In October 2017, the Draft classification criteria for Scenic and Historic Areas (provisional) was submitted to the Department of Standards and Quotas under the Ministry of Housing and Urban-Rural Development of China. However, no updated standards have been officially released to date. The draft criteria propose classifying Scenic and Historic Areas of China into 4 categories—sanctuary, ecological, heritage, and cultural heritage—based on their intrinsic characteristics and resource values.

In this dataset, the 244 Scenic and Historic Areas of China were classified according to the categorization criteria outlined in both the current Classification criteria for Scenic and Historic Areas (CJJ/T 121—2008) and the Draft classification criteria for Scenic and Historic Areas (provisional). For parks comprising dual-type landscapes, classification principles were applied as follows: under the CJJ/T 121—2008 standard, parks with components sharing the same category (e.g., Fuchun River-Xin'an River and Wangwu Mountain-Yuntai Mountain Scenic and Historic Areas of China, both classified as Riverine or Mountain Landscapes) were assigned their common category. Dual-type Scenic and Historic Areas that fall into divergent categories are classified under "Others" (e.g., the Yueyang Tower-Dongting Lake, Lintong Lishan Mountain-Qin Terracotta Warriors, and Mingsha Mountain-Crescent Spring Scenic and Historic Areas). For the draft criteria, according to the instructions in the standard specifications, when two or more types appear in a scenic and historic area, the higher ranked type is selected in the order of "sanctuary→ecological→heritage→cultural heritage". The classification results of these two criteria are jointly saved in the dataset.

4 Data Results

4.1 Dataset Composition

The Spatial distribution dataset of 244 Scenic and Historic Areas in nine batches of China comprises 2 components: (1) vector geospatial data of Scenic and Historic Areas (.shp format), and (2) attribute data, including park names, designation years, batches, classifications, and administrative divisions (.xlsx format) (Table 3).

Table 3 Attribute fields of dataset

Field name	Description
Index	1, 2, 3,⋯, 244
Name	Badaling–Ming Tombs, Shihua Cave, Panshan, ⋯
Classification	Lake landscapes, Riverine landscapes, Mountain landscapes, ⋯
Provincial division	Jiangsu Province, Beijing Municipality, Xinjiang Uygur Autonomous Region, ⋯
Municipal division	Nanjing City, Changsha City, Kaifeng City, ⋯
County division	Laishui County, Jingxing County, Zanhuang County, ⋯
Batch	Batch 1, Batch 2, Batch 3, ⋯
Date of promulgation	1982.11.8, 1988.8.1, 1994.1.10, ⋯

4.2 Data Results Analysis

In terms of provincial distribution, Zhejiang leads the country with 22 national-level Scenic and Historic Areas, followed by Hunan (21), Fujian (19), and both Jiangxi and Guizhou (18 each). Spatially, these areas are primarily concentrated in Southeast China. Conversely, Tianjin, Ningxia, and Qinghai record the lowest counts with merely one each (Figure 1). Notably, Shanghai currently possesses no such designated areas. A unique case is the Hukou Waterfall Scenic and Historic Area of China, which spans Linfen City (Shanxi Province) and Yan'an City (Shaanxi Province). Due to its transboundary nature, this park is counted as 0.5 sites in each province's total.

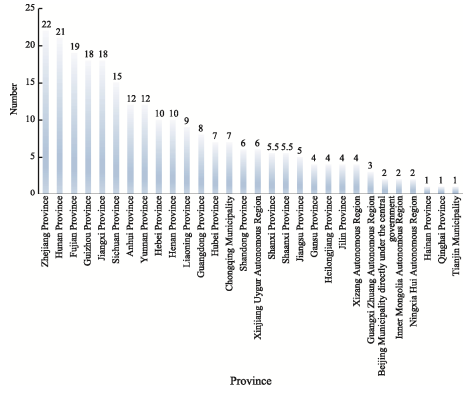


Figure 1 Statistics on the number of provincial distribution of Scenic and Historic Areas

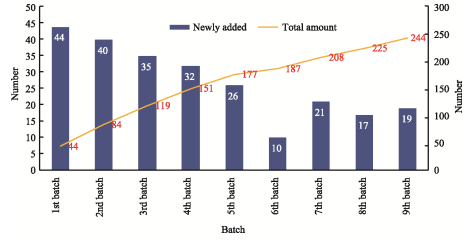


Figure 2 Statistics of the number of Scenic and Historic Areas in different batches

From a temporal perspective, since the designation of the first batch of Scenic and Historic Areas of China in 1982, the total number of these parks has exhibited a steady increase, rising from 44 in 1982 to 244 in 2017, with an average batch-wise growth rate of 25.1% (Figure 2). Among provincial-level administrative divisions, Zhejiang, Hunan, and Fujian have consistently ranked among the top provinces in terms of park quantity. Zhejiang and Sichuan jointly led the first batch with 4 parks each. Notably, Zhejiang and Hunan are the only provinces to have secured designations across all 9 batches. The Inner Mongolia Autonomous Region, which received its first Scenic and Historic Area of China in 2002, represents the most recent addition among all provinces with designated parks.

From a typological perspective, China is rich in landscape resources, with mountains and hills occupying two-thirds of its landmass. The rugged terrain, alongside various natural elements (e.g., rocks, soils, flora, and fauna), forms a high level of geodiversity and biodiversity, granting these areas significant ecological and aesthetic values. Simultaneously, China possesses vast river and lake networks. Based on the Bulletin of the first national

census of water (2010–2012) issued by the Ministry of Water Resources and the National Bureau of Statistics, there are 2,221 rivers with a drainage area ≥1,000 km^2, totaling 386,500 km in length. Additionally, 2,865 lakes maintain a perennial water surface area ≥1 km^2, totaling 78,000 km^2.

Driven by this natural background, China's Scenic and Historic Areas spatially tend to cluster around mountains and waters. River- and lake-type areas together comprise 28.8% of the total. GIS analysis reveals that 29.5% (72 areas) are situated within a 20-km buffer zone of major rivers, and 48% (117 areas) are within a 40-km buffer. From a provincial perspective, the proportion of river-type areas is notably higher in Zhejiang, Fujian, Guizhou, and Yunnan. Meanwhile, coastal provinces such as Zhejiang, Fujian, and Liaoning have a greater concentration of lake-type and coastal/island-type areas. Mountain-type Scenic and Historic Areas are widely distributed across the majority of provincial-level regions in China, with a particularly high concentration of such designated areas found in Zhejiang, Hunan, Fujian, Jiangxi, Henan, and Sichuan (Figure 3).



Figure 3 Distribution map of different types of Scenic and Historic Areas in China

5 Discussion and Conclusion

A comprehensive understanding of the spatial distribution of Scenic and Historic Areas of China is critical for informing resource conservation, tourism development, and sustainable management strategies, while also serving as a scientific reference for national and provincial-level planning. This dataset compiles comprehensive data on 244 national-level Scenic

and Historic Areas, which were promulgated by the State Council in 9 batches between 1982 and 2017. The dataset encompasses critical attribute information for each area, such as identification code, name, typological classification, and designation batch, while simultaneously integrating spatial data, including geographic coordinates and administrative jurisdictions. On this basis, the dataset still has room for further exploration and expansion. It can be combined with relevant data such as the natural protected area system, transportation routes, ecological environment background, and socio-economic data to conduct comparative analysis on the spatial pattern, type differentiation, and regional differences of national scenic spots, thereby enhancing the application value in the protection, management, planning, evaluation, and related research of scenic spots.

Author Contributions

Jiang, Y. J. and Ye, P. conducted the overall design of the dataset development; Yang, M. and He, J. collected and processed the data of Scenic and Historic Areas of China; Lu, Y. X. and Liu, Y. P. made data analysis and verification; Ye, P. wrote the data paper; Jiang, Y. J. reviewed the data paper.

Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] National Forestry and Grassland Administration, Ministry of Finance, Ministry of Natural Resources, Ministry of Ecological Environment. Spatial layout plan for national parks [EB/OL]. (2022-12-30) [2025-04- 21]. https://www.gov.cn/xinwen/2022-12/30/content_5734221.htm.

[2] Yan, G. T., Song, L. The value and development path of Scenic and Historic Area under the national park system [J]. *Chinese Landscape Architecture*, 2021, 37(3): 112–117.

[3] National Forestry and Grassland Administration. Regulations on Scenic and Historic Areas [EB/OL]. (2016-02-06) [2025-04- 21]. https://www.forestry.gov.cn/c/www/gkxzfg/659976.jhtml.

[4] Zhang, T. S., Sun, Y. Z. Spatial characteristics and functions of national scenic spots in China [J]. *Urban Development Studies*, 2019, 26(8): 6–12.

[5] Fu, L. Q., Zong, C., Kong, S., *et al*. The spatial distribution of National Nature Reserves and National Scenic Areas and ecotourism potential analysis [J]. *Chinese Journal of Wildlife*, 2015, 36(2): 218–223.

[6] Wu, J. Y. Study on spatial distribution characteristics of Chinese National Parks [J]. *Geographical Research*, 2014, 33(9): 1747–1757.

[7] Jiang, Y. J., Yang, M., He, J., *et al*. Spatial distribution dataset of 244 national parks in nine batches of China [J/DB/OL]. *Digital Journal of Global Change Data Repository*, 2025. https://doi.org/10.3974/geodb.2025.05.02.V1.

[8] GCdataPR Editorial Office. GCdataPR data sharing policy [OL]. https://doi.org/10.3974/dp.policy.2014.05 (Updated 2017).

[9] Ministry of Housing and Urban-Rural Development of P. R. China. Classification criteria for Scenic and Historic Areas (CJJ/T 121—2008) [S]. Beijing: China Architecture & Building Press, 2008.

[10] National Technical Committee on Digital Standardization for Intelligent Buildings and Residential Areas. Ministry of Housing and Urban-Rural Development releases “Draft classification criteria for Scenic and Historic Areas (provisional)” [OL]. http://www.ibrc426.com/newsitem/277843880.