



# 中國的世界地質公園

Global Geoparks of China

胡光曉 主編

Hu Guangxiao, Chief Editor

趙洪山 攝影

Zhao Hongshan Photography

地質出版社





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胡光晓 主编 赵洪山 摄影

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中國的世

界地質公園

郭端祥 丁酉年

# 《中国的世界地质公园》

主 编 胡光晓

摄 影 赵洪山

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## *Global Geoparks of China*

**Chief Editor** Hu Guangxiao

**Photography** Zhao Hongshan

**Associate Editor** Zhao Hongshan ZhanYu Yang Chen

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# 序

我国地域辽阔，地质结构复杂，地质作用形成了许多独特的地质遗迹景观。它们是大自然赐予中华民族的宝贵而不可再生的地质遗产；它们记载着地球发展的历史事件，谱写着生物进化和沧海桑田变迁的壮丽篇章。

地质公园是以具有特殊地质科学意义、稀有的自然属性、较高的美学观赏价值、具有一定规模和分布范围的地质遗迹景观为主体，并融合其他自然景观与人文景观而构成的一种独特的自然区域。既为人们提供具有较高科学品位的观光游览、度假休闲、保健疗养、文化娱乐的场所，又是地质遗迹景观和生态环境的重点保护区，地质科学研究与普及的基地。地质公园是一种自然公园，它是向游客展示地质景观的地球科学知识和美学魅力的天然博物馆。

本画册以地质公园独特而珍奇秀丽的地质景观为主，同时融合自然景观的地质科学意义，展示了中国世界地质公园的奇美。本画册的出版将对建设并宣传中国的世界地质公园，保护中国的地质遗迹，起到积极作用。

陈安泽

二〇一七年十月



# Introduction

Our country is known for the vast territory as well as the complex geological structures. A large number of unique geological heritage landscapes have been formed by the geological processes, which are the precious and non-renewable geological heritage given by nature to the Chinese nation. The geological heritage recorded the geological events of the Earth evolution and wrote glorious chapters about biological evolution and huge changes of landforms.

A Geopark is a unique natural region where the main part consists of geological heritage landscapes in certain scale and range with specific geological significance, rare natural property and high aesthetic value, combined with other natural and cultural landscapes. It is not only a place for sightseeing of high scientific standard, leisure, health care, cultural entertainment, but also a major protective zone of geological heritage and ecological environment, plus a base for research and popularization of geological sciences. A Geopark is a natural museum showing the Earth Sciences and aesthetic charm behind the geological landscapes.

This book is mainly about the unique, exotic and beautiful geological landscapes in Geoparks, and integrating the geological significance of the natural landscapes in order to show the great wonder of Global Geoparks in China. The publication of this book will play a positive role in construction and propagation of Global Geoparks of China as well as in well protection of Chinese geological relics.

Chen Anze

October 2017





# 前言

我国地域辽阔，地质地理条件复杂，地质作用形成了许多独特的地质遗迹。迄今为止，我国已发现七大类地质景观，包括地质剖面、地质构造、古生物化石、矿物与矿床、地貌、水体、环境地质等，反映了山、水、洞、峡、地震、火山、冰川、古生物等自然景观。

笔者期望通过本画册的出版，起到以下作用：一是促进地质遗迹的保护，提升公众对地质遗迹的保护意识；二是促进当地经济发展（地质公园的一项重要成果）；三是促进地学知识的普及；四是促进国际交流与合作，为网络成员搭起一座沟通的桥梁。

《中国的世界地质公园》画册的编著得到中国地质调查局地质项目“地质科学数据集成与服务系统建设”（项目编号：1212011120427）资助，感谢中国地质博物馆、中国地质学会旅游地学与地质公园研究分会和中国地质科学院等单位提供材料，感谢原地质矿产部宋瑞祥部长为画册题名，特别要感谢地质摄影家赵洪山十几年来历尽艰辛拍下的数万张地质摄影作品，为本画册提供了大量珍贵的影像资料。

本画册融文化元素、摄影艺术、地质知识于一体，将祖国山河的壮美、大地的雄浑、自然的旖旎，多角度、立体式地呈现在观众面前，期望能给大家带来美的享受。

胡光晓

二〇一七年十月

# Preface

Our country is known for the vast territory as well as the complex geological and geographic structures. The geological landscapes in China can be divided into seven major categories in this book, including geological sections, geologic structures, fossil localities, minerals and mineral deposits, landform, waters, and environmental geological heritage, which are reflected by the typical instance of mountains, waters, caves, canyons, earthquakes, volcanos, glaciers and fossils.

The publication of this book will play an essential role as follows: firstly, to promote the protection of geological relics, and to enhance the public awareness of the protection of geological relics; secondly, to stimulate the local economic development (an important achievement of geoparks); thirdly, to promote the popularization of Earth Sciences; fourthly, to encourage international exchanges and collaborations by setting up a bridge for the communications between network members.

This picture book is supported by the geological project of the China Geological Survey “Geological science data integration and service system construction” (No. 1212011120427) . We thank the Geological Museum of China, the Academy of Tourism Earth-science and Geopark Research , the Geological Society of China and the Chinese Academy of Geological Sciences for providing materials for the book. Thanks to Mr. Song Ruixiang, the former Minister of the Ministry of the Geology and Mining, for the title of the album. Special thanks go to the Geo-photographer, Mr. Zhao Hongshan, who has experienced all kinds of hardships to travel across rivers, gobi and deserts, concerning himself about the land, mountains and rivers, and taking tens of thousands of geological photos. It is he who has provides large volumes of valuable geological images for this book.

This picture book are amalgamation of cultural elements, photographic art and geological knowledge, exhibiting the magnificent mountains and rivers of our motherland, the forceful earth, the nature scenery in multi-aspect and three-dimensional perspective to the readers, in the hope that the enjoyment of beauty can be brought to everyone.

Hu Guangxiao

October 2017



# 目录 Contents

2 | 中国黄山世界地质公园  
Huangshan Global Geopark  
of China

6 | 中国庐山世界地质公园  
Lushan Global Geopark  
of China

10 | 中国云台山世界地质公园  
Yuntaishan Global Geopark  
of China

14 | 中国石林世界地质公园  
Shilin Global Geopark  
of China

18 | 中国丹霞山世界地质公园  
Danxiashan Global Geopark  
of China

22 | 中国张家界世界地质公园  
Zhangjiajie Global Geopark  
of China

26 | 中国五大连池世界地质公园  
Wudalianchi Global Geopark  
of China

30 | 中国嵩山世界地质公园  
Songshan Global Geopark  
of China

34 | 中国雁荡山世界地质公园  
Yandang Mountain Global Geopark  
of China

38 | 中国泰宁世界地质公园  
Taiping Global Geopark  
of China



42 | 中国克什克腾世界地质公园  
Hexigten Global Geopark  
of China

46 | 中国兴文世界地质公园  
Xingwen Global Geopark  
of China

50 | 中国泰山世界地质公园  
Taishan Global Geopark  
of China

54 | 中国王屋山—黛眉山世界地质公园  
Wangwushan – Daimeishan Global Geopark  
of China

58 | 中国雷琼世界地质公园  
Leiqiong Global Geopark  
of China

62 | 中国房山世界地质公园  
Fangshan Global Geopark  
of China

68 | 中国镜泊湖世界地质公园  
Jingpo Lake Global Geopark  
of China

72 | 中国伏牛山世界地质公园  
Funiushan Global Geopark  
of China

76 | 中国龙虎山世界地质公园  
Longhushan Global Geopark  
of China

80 | 中国自贡世界地质公园  
Zigong Global Geopark  
of China

84

中国阿拉善沙漠世界地质公园

Alxa Desert Global Geopark  
of China

104

中国天柱山世界地质公园

Tianzhushan Global Geopark  
of China

88

中国秦岭终南山世界地质公园

Zhongnanshan Global Geopark  
of China

108

中国三清山世界地质公园

Sanqingshan Global Geopark  
of China

92

中国广西乐业—凤山世界地质公园

Leye-Fengshan Global Geopark  
of China

112

中国神农架世界地质公园

Shennongjia Global Geopark  
of China

96

中国宁德世界地质公园

Ningde Global Geopark  
of China

116

中国延庆世界地质公园

Yanqing Global Geopark  
of China

100

中国香港世界地质公园

Hong Kong Global Geopark  
of China

120

中国大理苍山世界地质公园

Dali Mount Cangshan Global Geopark  
of China



124 | 中国昆仑山世界地质公园  
Mount Kunlun Global Geopark  
of China

128 | 中国织金洞世界地质公园  
Zhijindong Cave Global Geopark  
of China

132 | 中国敦煌世界地质公园  
Dunhuang Global Geopark  
of China

136 | 中国阿尔山世界地质公园  
Arxan Global Geopark  
of China

140 | 中国可可托海世界地质公园  
Koktokay Global Geopark  
of China

144 | 后记  
Postscript







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# 中国黄山世界地质公园

Huangshan Global Geopark  
of China

中国黄山世界地质公园位于安徽省黄山市境内，面积 160.6 平方千米。由温泉、玉屏、北海、云谷、松谷、钓桥、洋湖、浮溪、福固寺等九个景区组成。以花岗岩峰林地貌为主要特征，兼有形状不一的造型石、第四纪冰川遗迹、水体景观、珍稀动植物等典型的地质遗迹和丰富的生态资源。

黄山以峰高峭拔、雄峻瑰奇而著称，千米以上的山峰有 72 座。其中三大主峰分别是：莲花峰，海拔 1864 米，是华东第一高峰；光明顶，海拔 1840.4 米；天都峰，海拔 1810 米。黄山自中心部位向四周呈放射状地展布着众多的“U”形谷和“V”形谷。山顶、山腰和山谷等处，广泛地分布有花岗岩石林石柱。主要类型有穹状峰、锥状峰、脊状峰、柱状峰、箱状峰等。在立马桥、天都峰、北海等地段，一些学者认为有第四纪冰川遗迹。黄山冰川的存在与否已争论了半个多世纪，有待于科学家揭开最终的谜底。

The Huangshan Global Geopark of China covering an area of 160.6 square kilometers is located in Huangshan City, Anhui Province. It is a geopark including nine tourism areas, namely the Hot Spring, Yuping, the North Sea, Cloud Valley, Pine Valley, Hanging Bridge, Yang Lake, Floating Brook and Fugu Temple. Huangshan geopark is characterized by granite peak landscape as well as different shapes of stones, the Quaternary glacial relics, water landscape, rare animals and plants and other typical geological features and rich ecological resources.

Huangshan Mountain is famous for its imposing, precipitous and fantastic appearance. There are three main peaks among the 72 high and steep peaks that are over 1,000 meters high: the Lotus Peak, 1864 meters above sea level, is the highest peak of East China; the Bright Peak and the Heavenly Capital Peak are 1840.4 meters and 1810 meters above sea level, respectively. Numerous U-shaped and V-shaped valleys are distributed radially from the center of the Huangshan Mountains to all around. Granite stone forests are widespread within the geopark, forming the framework of its landscapes. The main types of peaks include domed, cone, ridge-like, column-like and box-shaped peaks, etc. The Lima Bridge, Heavenly Capital Peak, the North Sea and other areas are famous for the possible occurrence of Quaternary glaciers. Controversies about the occurrence of glaciers in Huangshan Mountain have lasted for about half a century, but no final conclusion has yet been reached so far.



<http://geopark.chinahuangshan.gov.cn/>





↑ 迎客松 The Pine Greeting Guests

↓ 西海峡谷 Xihai Canyon

