

Character Introduction



Professor Dashan

A knowledgeable geologist, who is amiable and likes to hang out with kids.

Qingqing

The mascot of Sanqingshan, who is outgoing and curious.



Contents



Introduction 4

How was Sangqingshan Formed? 6

The Most Beautiful Granite Landform: Peak Column 8

The Most Beautiful Granite Landform:
Peak Ridge, Peak Wall and Peak Cluster 12

The Most Beautiful Granite Landform: Shaped Rocks 14

The Most Beautiful Granite Landform: Canyon 17

Discover the Mystery of Granite Landform 18



Geological Structure ————— 20

Meteorological Wonder ————— 22

Treasure Trove of Plants ————— 24

Paradise for Animals ————— 26

Taoist Culture ————— 28

National Customs and Intangible Cultural Heritage ————— 30

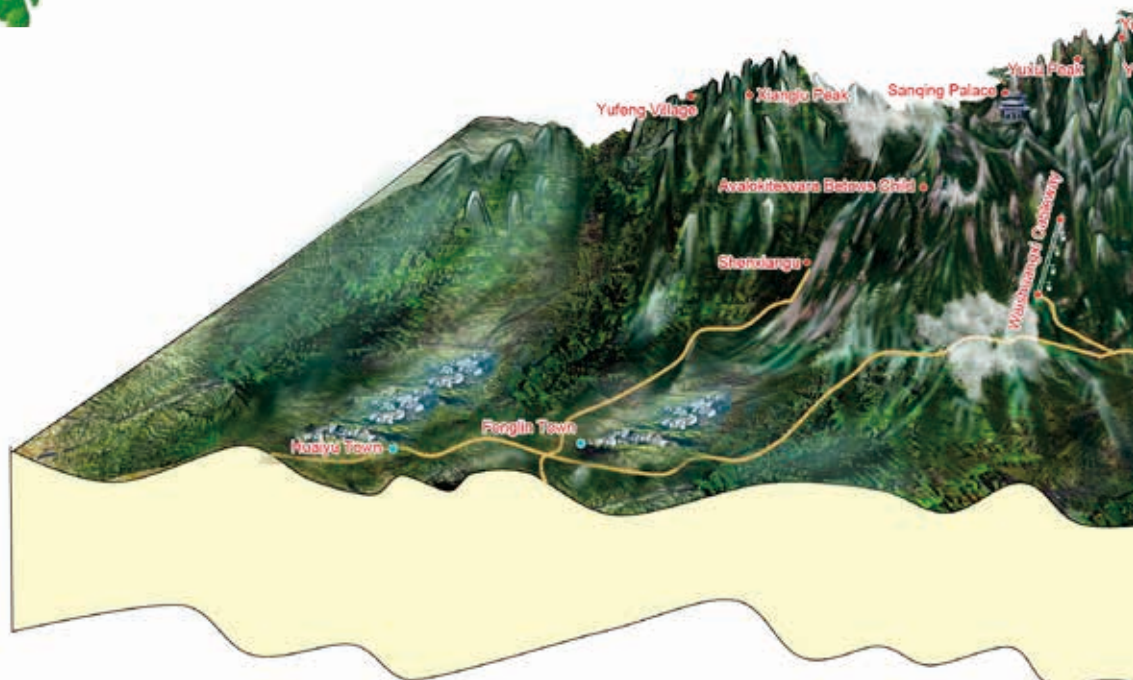
Three Treasures of Sanqingshan ————— 32

Notice ————— 33





Introduction



Professor Dashan, I heard that you've been to many geoparks, so I was wondering if you can tell me what a geopark is?

Ok! A geopark is a park enabling us to better understand the Earth we are living in. There are lots of geoparks worldwide.



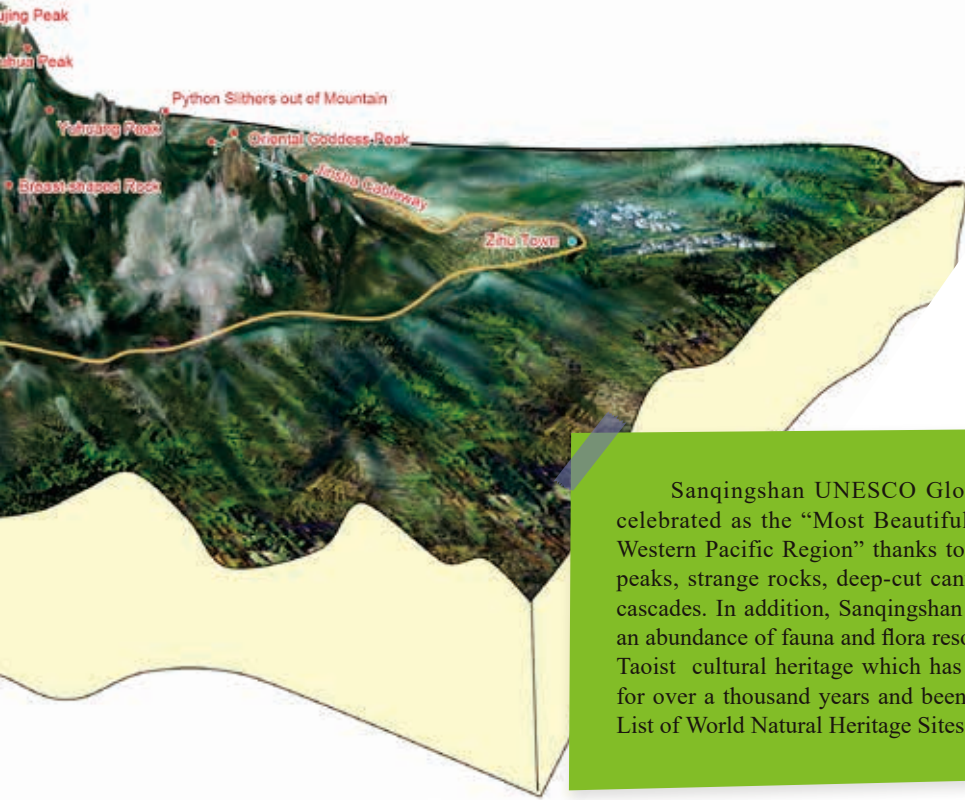
So what can you learn in these geoparks?

Ah, well, it depends on which one you refer to...How about I take you to Sanqingshan UNESCO Global Geopark?



Terrific! Let's go!





Sanqingshan UNESCO Global Geopark is celebrated as the “Most Beautiful Granite in the Western Pacific Region” thanks to its magnificent peaks, strange rocks, deep-cut canyons and flying cascades. In addition, Sanqingshan is also home to an abundance of fauna and flora resources as well as Taoist cultural heritage which has been conserved for over a thousand years and been included in the List of World Natural Heritage Sites.

Location of Sanqingshan UNESCO Global Geopark



Sanqingshan UNESCO Global Geopark is located in Shangrao City, Jiangxi Province, China, covering a total area of 433 square kilometers.



How was Sanqingshan Formed?

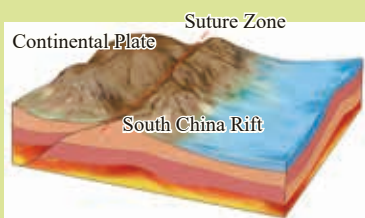
Qingqing, one billion years ago, there was no mountain at all and the Sanqingshan area was a vast ocean.



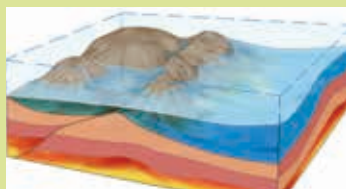
Really? How did it become a mountain?



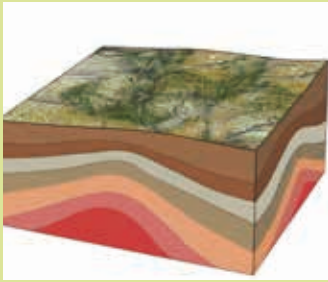
880 million years ago, the Sanqingshan area was only an island arc in the ancient South China Ocean. To its north was the Yangtze Plate and to its south the Cathaysia Plate.



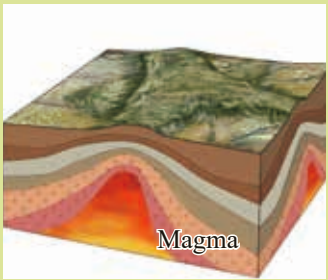
About 850 million years ago, the land was formed by the collision of the Yangtze and Cathaysian Plates with Sanqingshan located just at the suture zone between the Continental Plate and the South China Rift.



Sanqingshan has undergone several major geological events, such as the Ancient South China rift, as well as volcanic events (850 million years ago), anoxic events in the early Cambrian period (540 million years ago), the flourishing and extinction of graptolite fauna during the Ordovician (480–440 million years ago), and the Caledonian movement (410 million years ago).



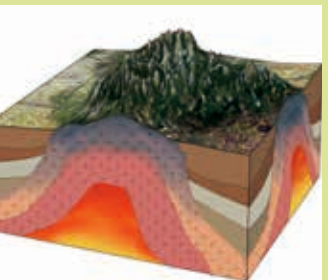
With several ingressions and regressions, and billions of years of geological evolution, continuous strata were formed in the Sanqingshan area.



About 140 million years ago, due to the Yanshan Movement and magmatic intrusion, Sanqingshan granite rock mass formed.



Around 65 million years ago, due to the subduction and obduction of the Pacific Plate to the Eurasian Continent, Sanqingshan rose again and formed a triangle block mountain



About 2 million years ago, Sanqingshan rose steadily and formed granite peak clusters and columns as a result of weathering, erosion, collapse, etc.



The Most Beautiful Granite Landform: Peak Column



Look! The column in front of us really looks like a python!

This is one of the most popular geosites and is named “Python Slithers out of Mountain”. Towering at a height of 128 meters, with its diameter ranging from 7 to 10 meters, it really resembles a python slithering out of the mountain.



How was “Python Slithers out of Mountain” formed?



1 The granite body was cut by two sets of vertical fractures (joints) and underwent weathering, runoff erosion and gravitational collapse, etc.



2 The remaining part of the peak column, in the shape of a giant python, stands upright over the valley.





Oriental Goddess Peak

This is “Oriental Goddess Peak”, one of the wonders. This granite peak column, towering at a magnificent height of 86m, is the very image of an oriental girl sitting elegantly among the peak cluster, with her long hair cascading around her shoulders.

How is Oriental Goddess Peak formed?



1 The granite body was cut into a peak column by two sets of near-vertical fractures (joints).



2 The peak column was cut by the flat-lying fissures (joints) into two sections and then



3 After spheroidal weathering the remains look like a goddess sitting demurely.

Did you know?

Peak columns refer to independent granite columns whose heights normally range to several decameters or even several hundred meters. Sanqingshan is home to many of them in various shapes. “Python Slithers out of Mountain” and “Oriental Goddess” are all columns.



Avalokitesvara Bestows Child

This granite peak column, in the shape of the Avalokitesvara, a Goddess in ancient Chinese legend, holding an infant in her arms which she wishes to bestow on the Mortal, is named “Avalokitesvara Bestows Child”. It was formed when the granite body was cut along its fractures (joints) and subjected to weathering, erosion and gravitational collapse.

Duxiu Peak

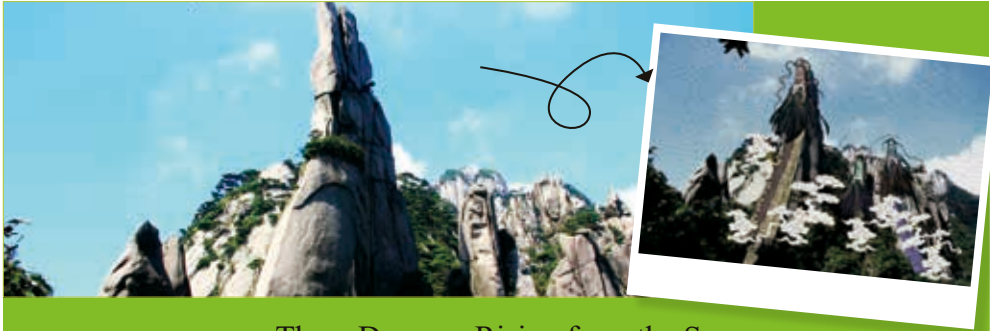
This granite peak column towers in the serene and secluded valley. A verdant and vigorous pine grows on the peak, so it is known as “Duxiu Peak”.



How is “Duxiu Peak” formed?



- 1 The granite body was cut by its vertical fractures (joints).
- 2 The granite body was weathered and eroded along its vertical fractures (joints) and underwent intense gravitational collapse.
- 3 The remaining part formed the isolated peak column.



Three Dragons Rising from the Sea

Three magnificent granite peak columns with a height of 60m are like three silver dragons soaring above the sky. So it is named “Three Dragons Rising from the Sea”. It was formed when the granite body was cut by two sets of vertical fissures (joints) at different directions and further affected by weathering, runoff erosion and gravitational collapse, etc.



Horse-head Rock

The granite peak column is named “Horse-head Rock” because it looks like the head of a horse. It was formed when granite body underwent differential weathering along its fractures (joints).

Did you know?

Rocks weather at different rates and intensities due to contact with weathering agents such as water, air, plant roots, animal burrowing and organic fluids, and as a result of variations in mineral composition and structure, which usually result in the breaking down of the rock and an uneven rock surface. This variation is known as differential weathering. Rocks with stronger weathering resistances protrude and those with weaker resistance are broken or fall off.

The Immortal Points out a Road

On the top of this granite peak column stands a slender clint which is about 1.5m high and 0.6m in diameter. It looks like a slim finger pointing to the sky as if it was pointing out a road for becoming immortal; it is honored as “The Immortal Points out a Road”.



How is “The Immortal Points out a Road” formed?



1 The granite peak column was cut by its vertical fractures (joints).



2 After gravitational collapse along its fractures (joints), the column became the prototype of a finger, namely, the clint.



3 The corners of the clint were rounded after weathering erosion, the remnant part formed the landscape resembling an extended finger.



The Most Beautiful Granite Landform: Peak Ridge, Peak Wall and Peak Cluster



Tri-seats of Sanqing

The three big cone-like granite peaks, Yujing Peak, Yuxu Peak and Yuhua Peak jointly make a peak ridge. Thanks to the three peaks, Sanqingsan is able to scrape the sky. As the three peaks bear a resemblance to three seats for the three Taoism founders, Yuqing, Shangqing and Taiqing, they are named “Tri-seats of Sanqing”.



Screen to Firmament

This granite peak, extending over 100m and rising to a height of 60m, looks like a wall. The upright wall with its smooth surface resembles a screen. Therefore, it is named the “Screen to Firmament”.

How is “Screen to Firmament” formed?



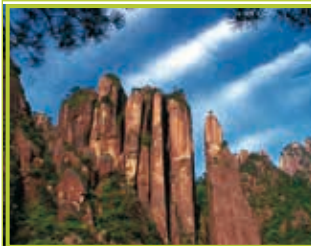
1 The granite body collapsed along vertical fractures (joints) under the force of gravity and formed a slate-shaped stone wall.



2 The stone wall was weathered and eroded along its vertical fractures (joints) in another direction and a host of vertical gullies appeared on its surface.



3 The remaining part became a screen-like peak.



Millions of Tablets Point to the Sky

This is a granite screen-like peak connected by 7 upright peak columns which are like the tablets in the hands of ancient Chinese officials when attending the national affair meeting chaired by the Emperor. It was formed when the granite body was cut by two sets of vertical fractures (joints) and underwent weathering, runoff erosion, etc.





Camel Peak

“Camel Peak” is a pictographic landscape formed by a combination of granite peak cluster and peak columns. The peak column on the right hand side resembles the head and neck of a camel while on the left hand side the peak clusters standing side by side look like the camel’s body, hence the geosite’s name.

How is “Camel Peak” formed?



1 The granite body was cut by its vertical fractures (joints).



2 The granite body underwent weathering, runoff erosion and gravitational collapse.



3 The remains look like a camel.



Pilgrimage of Five Seniors

The bottoms of the five granite peaks are interconnected and have sharp cone-shaped summits. Viewed from afar, they are like five seniors on their pilgrimage. In accordance with the story of the five seniors in Taoism, they are named “Pilgrimage of Five Seniors”

How is “Pilgrimage of Five Seniors” formed?



1 The granite massif was broken along its fractures (joints).



2 The granite peak clusters formed due to weathering, erosion and collapse look like five seniors on their pilgrimage.



The Most Beautiful Granite Landform: Shaped Rocks



Wow, there're so many magnificent rocks here!

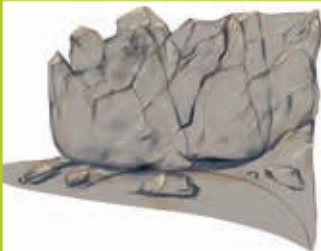
Right. People gave them lively names. See if you can find some more interesting rocks.



Penguins Offer Peach

The granite looks like a pair of penguins offering a peach, so its name is “Penguins Offer Peach”. The beaks of the penguin are stone cones which were worn away by differential weathering.

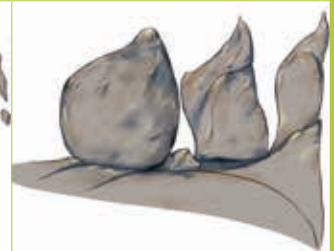
How is “Penguins Offer Peach” formed?



1 The granite body was cut by its fractures (joints).



2 The granite body underwent weathering and runoff erosion along its fractures (joints) and gravitational collapse.



3 The remaining granite looks like two penguins offering a peach.



Fox Chases the Chicken

On the top of this granite are two boulders. One resembles a fox and the other a chicken. The vivid image of a fox chasing a chicken earned it the name “Fox Chases the Chicken”. It was formed when the granite body was cut by several sets of fractures (joints) and further affected by differential weathering, runoff erosion and gravitational collapse, etc.



The Monkey King Appreciates Treasure

The granite boulder with a height of approximately 7m and a diameter of around 4m is called “The Monkey King Appreciates Treasure” because it looks like a monkey king holding a piece of treasure and sitting alone on the summit. It was formed when the granite body was cut by fractures (joints) and was further subjected to gravitational collapse, spheroidal weathering, etc.



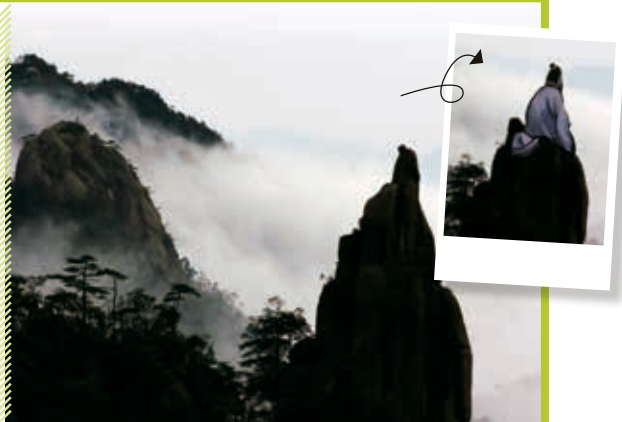
Rhino Rock

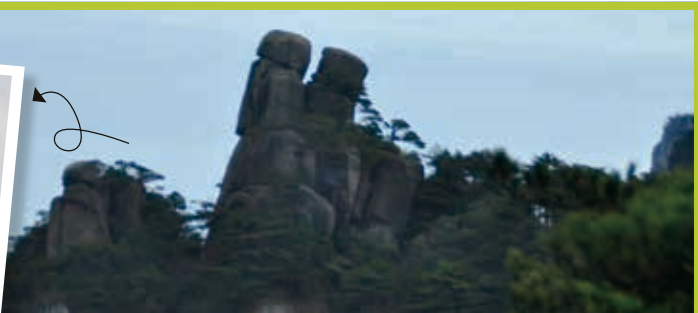
This granite boulder with a height of about 40m and width of 20m has a protruding stone cone on it, which looks very much like a mono-horned rhino. It was formed when the granite boulder was cut by several sets of fractures (joints) and was further affected by weathering, runoff erosion and gravitational collapse.



Taoist Priest Worships the Moon

This granite peak column, 30m high and 10m wide, resembles a Taoist priest facing the firmament, sitting solemnly in an attempt to become enlightened. Therefore, it is named “Taoist Priest Worships the Moon”. The granite underwent gravitational collapse along its vertical fractures (joints) and was subjected to subsequent differential and spheroidal weathering, etc.





Lover Rock

The Lover Rock is a pair of rock columns connected at the bottom and separated on top. Looking like two lovers embracing each other tightly, they are named the “Lover Rock”. In the swift uplift process, the granite mass was pressurized and generated vertical and nearly flat-lying fractures (joints) along which the force of weathering and erosion continuously worked. Meanwhile, the rock mass underwent gravitational collapse and spheroidal weathering.

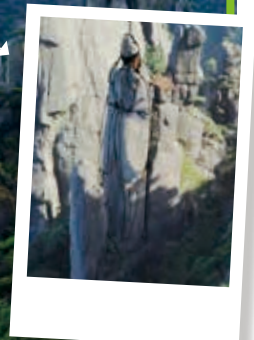
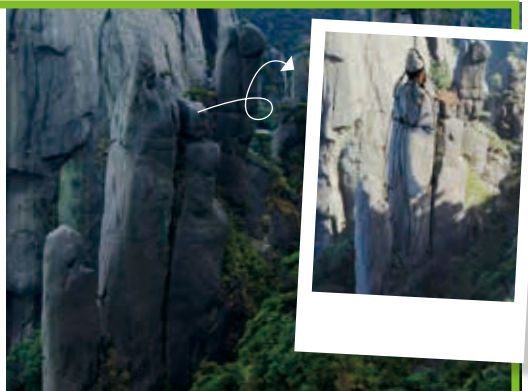


Mother and Son Rock

This granite boulder vividly depicts a picture of a benevolent mother carrying her son on her back. Therefore, it is named the “Mother and Son Rock”. It was formed when the granite mass was cut by its fractures (joints) and further subjected to gravitational collapse, weathering and runoff erosion, etc.

Guojiu’s Attaining Enlightenment

This granite peak column resembles a reader in a cloak who has had his hair coiled. The landscape is interpreted as being Cao Guojiu, a mythological figure in Ancient China, who is reading scriptures on the counter, hence the name. It was formed when the granite peak column was subjected to differential weathering.





The Most Beautiful Granite Landform: Canyon



Wow, look at the canyon. It is so deep.

This is the Immortal Canyon, the most magnificent and the steepest canyon located in the West Coast of Sanqingshan.



The Immortal Canyon

The Immortal Canyon stretching over 2,500m is V-shaped when viewed from its fault surface and it plunges to a depth of over 300m. In addition to its cliff flanks, it is notable because people are denied access to it. As only the immortal can fly across it, the canyon is named “The Immortal Canyon”. The V-shaped canyon was formed when running water rushed and eroded its course along the fissures and ruptures.



Fushou Gate

The granite column splits the canyon into two parts, forming two accesses resembling two open gates which have been dubbed “Fushou Gate”, literally meaning the “gate of happiness and longevity”.

How is Fushou Gate formed?



1 The granite body at the flanks of the canyon was eroded by running water along its vertical joints (factures).



2 Gravitational collapses occurred at one side of the canyon and left only one granite column.



3 The granite column split the canyon into two passages, resembling two open gates.

Did you know?

On the left side is the gate of happiness and the right side the gate of longevity. Which gate did you pass through? If you want to be blessed with both happiness and longevity, try circling them both.





Discover the Mystery of Granite Landform



Qingqing, do you know what granite is?



Yes. It is formed as magma cools and condenses into igneous rock underground.



Indeed. Granite is the major material for the formation of Sanqingshan landform.



What kind of minerals is granite made up of?

Granite mainly consists of quartz, feldspar and mica. Due to its hardness and corrosion-resistance, granite, a kind of crystalline rock, is a premium decorative construction stone material.



Granite



Feldspar

Feldspar crystals are stubby prisms, often pink to white.



Mica

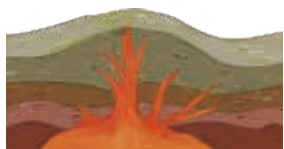
All micas form plate like and flaky crystals, black or white. Mica is so soft that you can scratch it with a fingernail.



Quartz

Quartz is one of the most common minerals in the Earth's crust.

How is granite formed?



1 Magma from deep underground intrudes into the Earth's crust.



2 Magma cools and then granite mass forms.



3 The Earth's crust uplifts, exposing granite mass.





You mentioned granite being so hard, but how did it form such marvellous landscapes?

Good question. It is formed by weathering and erosion of granite. A joint occurs during the formation of granite, which is an important factor that affects the weathering of rocks.



What is a joint?

A rock has fractures. When the rocks on either side of the fractures do not move along the fracture surface, the fracture is called a joint. There are three sets of primary joints in granite: flat-lying joint, vertical joint and diagonal joint.



Did you know?

Weathering refers to the process of physical and chemical changes which take place when the rocks on or near the Earth's surface come into contact with the Earth's atmosphere, biota and waters.



Physical weathering: The breakdown of rock into solid fragments by temperature differences and mechanical processes and its' chemical composition of rock is not altered.

Chemical weathering: the decomposition of rocks and minerals by chemical and biochemical reactions.

Biological weathering: disintegration of rocks due to the actions of plants/animals upon some or all constituent minerals.



Water-filled crack Freezes to ice Brevels Rock
Frost wedging is physical weathering.



Acid rain is chemical weathering.



Root wedging is biological weathering.



Geological Structure



Prof. Dashan, could you please let me know what the bends are?

It is a common form of geological structure in the Earth's crust.



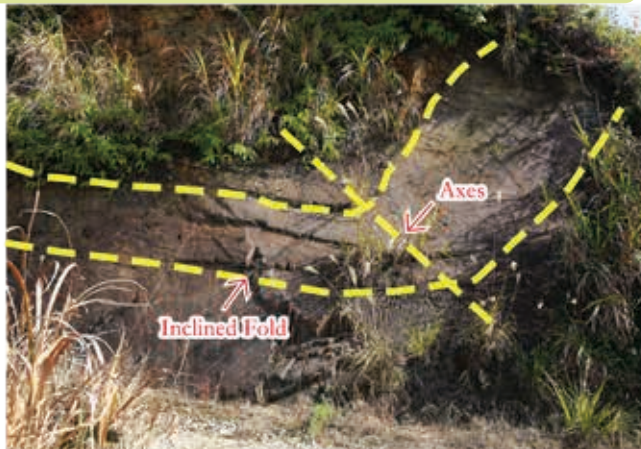
Fold?

The flat and planar stratified rocks may bend when they are under pressure during a long period of time. The bend is called fold in geology.



Is it usually so big?

Some are very big, other are small. Big folds can stretch several kilometers or even hundreds of kilometers, while small ones are only a few centimeters or can only be seen under a microscope.





Look, there is a valley.

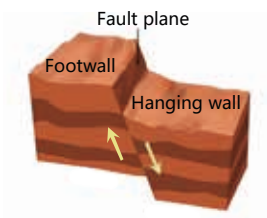


Wha is a fault?

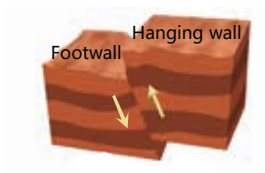
Yes. It is formed as a result a fault.



A rock formation or body may fracture and deform under certain stress and if the rock mass on either side of the fracture have moved past each other, it is called a fault.



Normal faule : hanging wall moves downward and footwall moves upward.



Reverse fault : hanging wall rises and the footwall descends.



Strike-split fault : rocks move horizontally along the fault plane.



Meteorological Wonder



Professor Dashan, which is the best season to travel in Sanqingshan?



Sanqingshan has four distinct seasons. You'll enjoy different landscapes at different seasons.



Azalea Blossoms

From late April to early June each year is the best time for flower watching. During this period, *Azalea*, *Rhododendron fortune*, *Rhododendron rubropilosum*, *Rhododendron simiarum* successively blossom to vie for beauty. In addition, when the azaleas blossom on the top of the thousand year old *Rhododendron* tree, you will enter the world of flowers.



Sunglow in the Sky

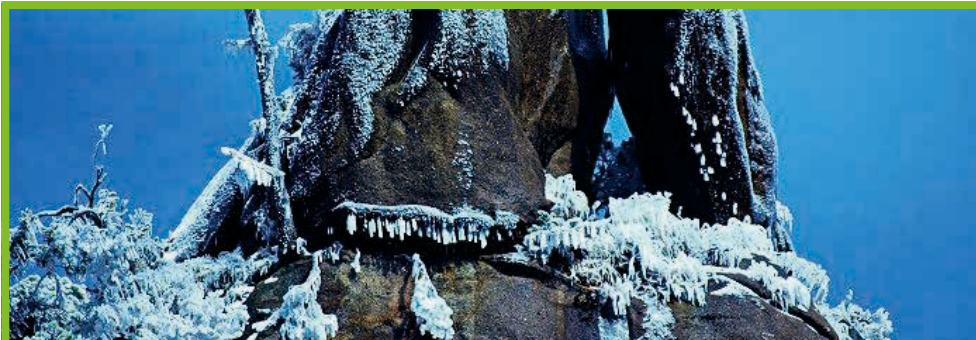
The summer of Sanqingshan is usually cool due to its high altitude. It is suitable for watching sunrises and the sea of clouds during this season. The morning glow and sunset glow are both amazing during a sunny day. When appreciating scenery on the mountain, you will feel as if you are stepping on to the clouds and roaming in a fairyland.





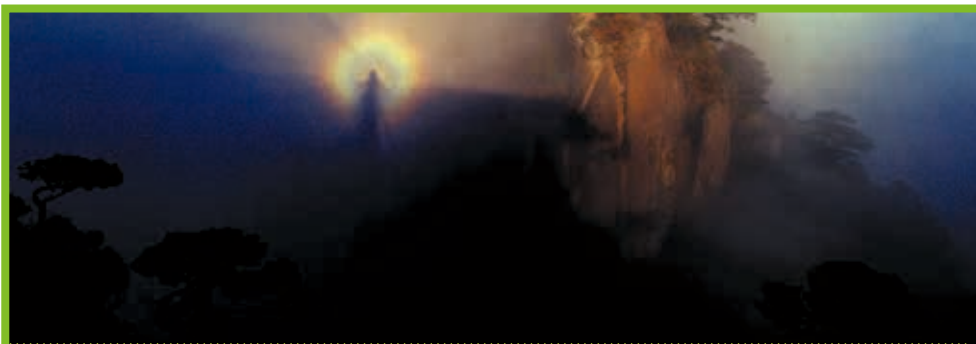
Colorful Golden Autumn

The autumn of Sanqingshan resembles a splendid picture of water and peaks. The jade-like rocks and fire-red maple leaves together with the magnificent sea cloud immerse you in the beauty of autumn.



Silver Winter

The snow-covered Sanqingshan is an absolutely charming landscape highlighted by rime. In winter, all the trees and branches are coated by silver and crystal rimes hanging on the branches. When the wind caresses them, the rimes will make a pleasant dingdong sound which is like a touching melody.



Buddha Light of Sanqingshan

If you're lucky, you can even witness the Buddha Light of Sanqingshan. The magic light is formed when the light casts on the surface of cloud mist and gets diffracted and reflected. Sunshine will project one's shadow on the cloud while the tiny ice crystals and water drops in the cloud will form a special circular rainbow.

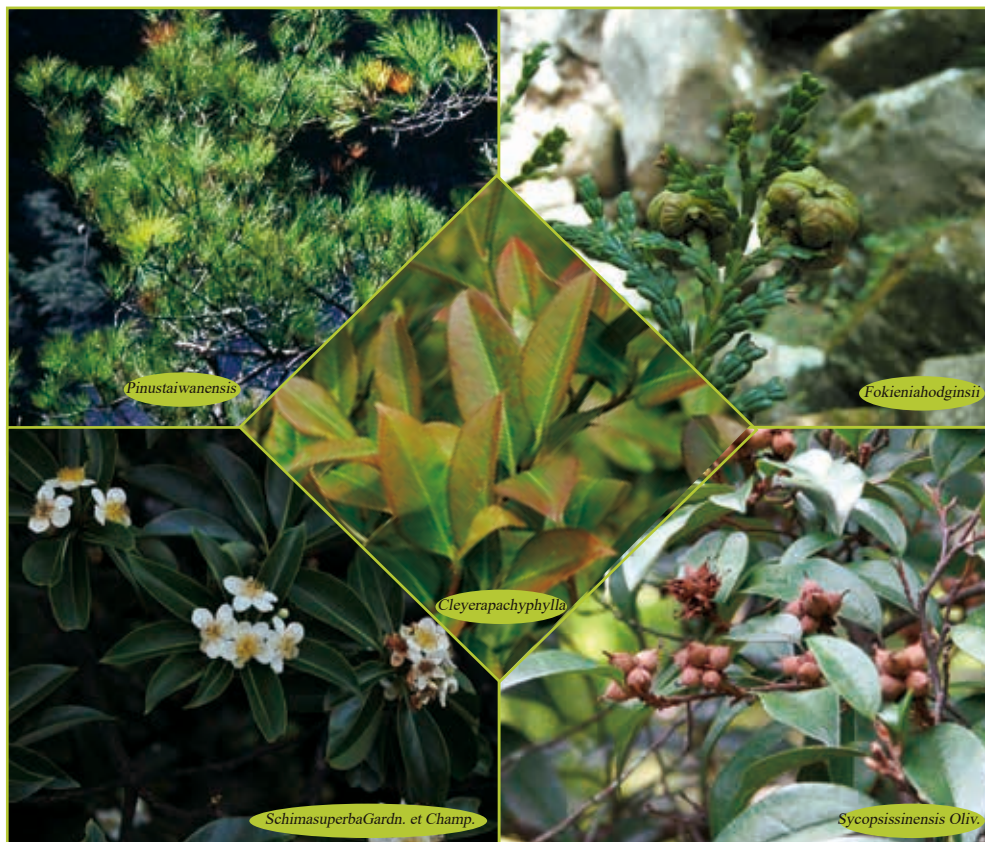
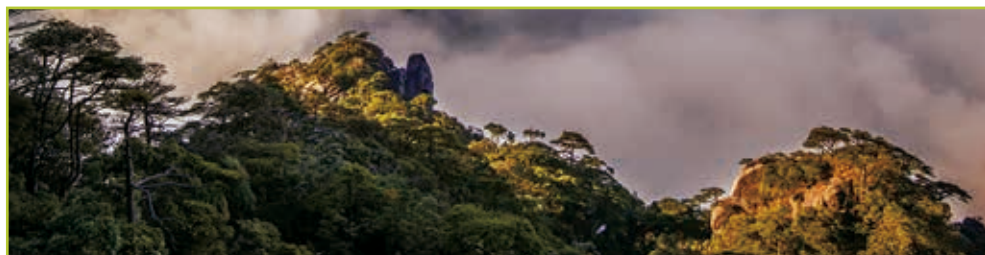


Treasure Trove of Plants



What a beautiful forest!

Sanqingshan has formed its unique mid-subtropical evergreen broad-leaf forest ecosystem composed of 2,373 higher plant species in 9 vegetation forms including evergreen broad-leaf forest, evergreen broad-leaf and deciduous broad leaf mingled forest, etc.





Carpinus viminea Lindl.



Rhododendron simiarum



Pseudotsuga gaussenii



Liriodendron chinensis



Disanthuscercidifolius var. *longipe*



Taxus chinensis



Some species such as *Pseudotsuga gaussenii* and *Taxus chinensis* are rare, so we must take action to protect them.



Paradise for Animals

Are there a lot of animals in Sanqingshan?

Thanks to its high rolling peaks and deep canyons, Sanqingshan has created an excellent natural environment for wildlife to inhabit and reproduce; there are more than 300 species, such as birds, animals, insects and amphibians, etc.



Amphibians



Birds



Mammals



Panthera pardus



Dremomyspernyi



Macaca thibetana



Among the wild animals in Sanqingshan, lots of them are national rare animals such as *Garrulax galbanus*, *Syrmaticus ellioti*, pangolin, leopard and rusa, etc.



Garrulax galbanus

Garrulax galbanus is a subspecies endemic to China. With only fewer than 200 of them living in a narrowly distributed area, they haven't been found in the wild for nearly 50 years. In 1994 it was listed as a near-threatened species. Fortunately, in 2000, the species was confirmed to be distributed here in Sanqingshan.



Pangolin

Pangolin is among the most endangered species worldwide. It is a Class II National Protected Species. In the favourable environment of Sanqingshan, they are well protected.



Syrmaticus ellioti

Syrmaticus ellioti lives in the east and south region of sub-Yangtze River. The well-conserved vegetation and vast broad leaved forest and coniferous forest in Sanqingshan create a perfect habitat for it.



Rusa

Rusa live in the sub-tropical mountain forests and used to be widespread in southeast China. Sanqingshan provides *Rusa* with a desirable living environment where they are taken good care of.



Taoist Culture

Look! Where is this?

This is the Sanqing Temple, a sacred place for Taoism in Sanqingshan. Taoism is a religion indigenous to China and was founded in the late Eastern Han Dynasty 1800 years ago by Zhang Daoling. Ge Hong was the one who first developed Sanqingshan Taoism here.



Did you know?



Ge Hong (284 ~364A.D.) was also called Zhichuan by his style name and Baopuzi by his courtesy name. In the First Shengping Year of the Eastern Jin Dynasty, Ge Hong came to Sanqingshan and together with Minister Li, he dug an elixir well, manufactured a refinery oven and began to make elixir and preach the doctrine of Taoism.

Taoist Architecture Museum

Sanqingfudi is an open-air museum for the ancient architectural complex of Taoism. In terms of site selection and layout, it adopts the philosophy of “learning from nature”. Integrating natural scenery and artificial landscapes, the building is an embodiment of the harmony between human beings and nature. It is also a treasure trove for studying the design and layout of ancient Taoist buildings.



Dragon & Tiger Hall



Zhanbiyun Tomb



Jiutianyinguan Hall



Yanjiao Hall



Feixian Pagoda



Jiucha Hall



Leigong Pagoda



Fenglei Pagoda



Fuditian Gate



Qianbu Gate



National Customs and Intangible Cultural Heritage



What traditional festivals does the She Nationality celebrate?

March 3rd in the lunar calendar is a traditional festival for the She Nationality. On this day each year, a grand singing festival is held, sacrifices are made to ancestors and the God of Crops, and guests are entertained with black rice. Therefore, this festival is also known as the Festival of Black Rice



Their costumes are so beautiful, especially the colourful, exquisite clothes and headwear worn by the girls.



Yes. In addition, they are good at dancing and singing.

Did you know?

The She Nationality is a nomadic ethnic group in South China. They have enjoyed a long history of over 1,000 years and have a population of around 710,000 distributed mainly in the mountainous regions of Fujian and Zhejiang Province. A minority of them live in Jiangxi and Guangdong Province. The She dialect is similar to Hakka dialect. As they don't have their own characters, Mandarin is in common use. Yinjiang Village located in Sanqingshan Geopark is a traditional She village, where the seniors wear She costume in daily life.



Costume of the She Nationality



Dance of the She Nationality



Local Customs



He Tang Jiu

He Tang Jiu Feast is a local feast in Xixiang, Yushan County. In Chinese, "He" means celebrate, "Tang" means soup and "Jiu" means Feast. It includes dozens of dishes and soup, which are served one by one. In ancient times, the local people held a feast to celebrate happy events, where the guests could enjoy local opera as well as delicious dishes and soup. It usually took them two hours and they really enjoyed it. Therefore the people have kept it for generations.



Yushanban Performance

Yushanban Performance is a style of performance where people use poems, singing and dancing to show plots and characters. Its four major elements are “language”, “performance skill”, “musical instruments” and “costumes”. As the performance usually vividly demonstrates local features, it is celebrated as a “living fossil of drama”.



Madeng Drama

Madeng Drama is also called “Zhuma Drama” or “Paozhuma”. The frame of the Madeng (which literally means Horse Lantern) is made of bamboo. The frame is covered with a layer of paper or gauze. The head of the horse is tied in front of the performer’s waist and the bottom of the horse behind it. As the head and bottom of the horse are empty, it can be decorated with lighted candles inside.



Zhangcun Board Lantern

The Board Lantern also known as the Bridge Lantern, is said to have originated during the years of the Reign of Emperor Kangxi of the Qing Dynasty. The Board Lantern is composed of a leading lantern, middle lanterns and tail lantern. The leading lantern has two categories: five-crop head lantern and dragon head lantern. The former is so named as it has five lanterns in total which bring good luck for a harvesting year.



Three Treasures of Sanqingshan

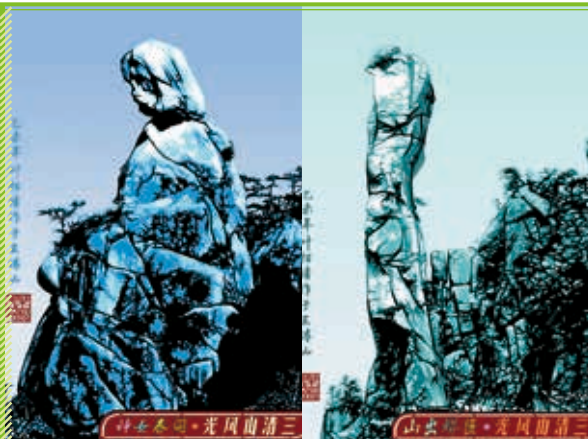


Black Tea

Sanqinghong is a brand of black tea produced in the Sanqingshan Geopark and forests above approximately 1,200 meters. Due to the high mountain conditions, high-density forest cover and the unique soil property, Sanqinghong has different high quality varieties, such as Gaoshanlaocong and Sanqingxiaozhong.

Paper Cutting

Multilayer and stereoscopic cut paper is composed of differently cut paper in different colors which each deal with different procedures such as picture analyzing, hierarchical analyzing, drawing, smoke curing, carving and mounting.



Dendrobe

The artificial cultivated dendrobe which grows up in the ascendant natural environment in Sanqingshan, is good for the digestive system and respiratory system as traditional Chinese medicine.





Prior to admission, please consult the park permits and environmental regulations.



Promote environmentalism and stop behavior that damages the environment.



Beware of thunderstorms.



No Littering.



Remain alert to the dangers of cliffs, steep slopes and slippery rock surfaces.



Do not take rocks or fossils away.



Promote environmentalism and stop behavior that damages the environment.



No Graffiti.



Protecting flora and fauna.



Beware of falling into water.

