



# A Study of Prehistoric Cloud and Water Texture Human Face Rock Paintings in the Upper Laohahe River

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**Abstract:** To understand the ancient rock paintings correctly, we should start with the analysis of the rock painting chronology and the rock painting form. For the rock paintings rich in quartz crystal, such as the water texture Rock Paintings of Hongshan Hou in the upper reaches of Laohahe River in northern China, we have succeeded in the rock paintings of Hongshan Hou and Zhang Yingrui of Jiguo in Yuan Dynasty according to the dating equipment, procedures and methods used by the international rock painting organizations [1-3]. The tombstone, the tombstone of Zhang Chonglu, the metropolitan governor of the Yuan Dynasty, the tombstone of Confucianism on Quanning Road in the Yuan Dynasty, and other chronologically rich in quartz crystals, were scientifically and noninvasively extracted from the micro-corrosion (microscopic) sample data. According to the corrosion width (area) of quartz crystals in chronological years, the corrosion width per thousand years was obtained, and the production age of rock paintings was calculated. In order to test the accuracy of micro-corrosion dating method, we can adopt the method of cultural relics analogy to make a comparative study on the shape system of rock paintings and the decorative patterns of painted pottery unearthed from rock paintings sites. Results The micro-corrosion dating method was used to measure the E5000+1071/-1071 years and the E5000 years of the moist rhyolite carving in Hongshan Houcao cave. This method was basically consistent with the 5000 years of the colored pottery (carbon 14 dating) unearthed from the rock painting site. Conclusion: Three moist-water rhyolite paintings were found in a river in the upper reaches of Laoha River. The method of making them is the same as that of making them in the same time. The style of making them is the same as that of "cloud and water" in oracle bone inscriptions.

**Keywords:** Cloud and Water Texture, Human Face Rock Paintings, Red Mountain Behind, China

## 1. The Geographical Location of Cloud and Water Texture

In the investigation of northern rock paintings, up to now, we have discovered that there are three areas in the cloud and water texture human Face Rock Paintings, two of which are located in the excavation site of Xiajiadian Lower Ancient City on the north bank of the Yinhe River in Songshan District, Chifeng City, Inner Mongolia; At an altitude of 693 meters, longitude 118.620; latitude 42.369. The other is located at the half-waist of the excavation site of Hongshan Mountain on the east bank of the Yingjin River in the upper reaches of the Laoha River in Hongshan District, Inner Mongolia. The altitude is 664.2 meters, longitude 118.987, and latitude 42.302.

Three shop rock paintings and red rock paintings are located in the Yin River - Yingjin River - Laoha River - Liaohe river system, the two lines of moire face rock painting straight line distance 31 kilometers (Figure 1).

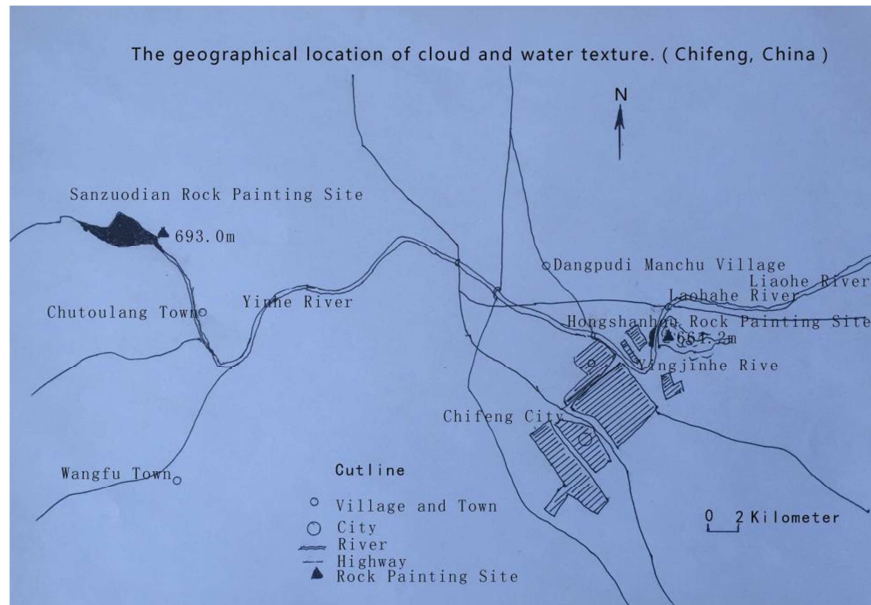
## 2. The Main Shape of Rock Art and Its Surrounding Remains

### 2.1. The Post-Red Mountain

The post-Red Mountain rock painting is carved by the ancients on the cliffs of red granite. The figure of the cloud and water texture human Face Rock Paintings is 38 cm high and 40 cm wide. The groove width is 1-1.8 cm and the depth is 0.5-1 cm. Wait. The cloud and water texture human Face Rock Paintings is composed of two parts: the above is composed of

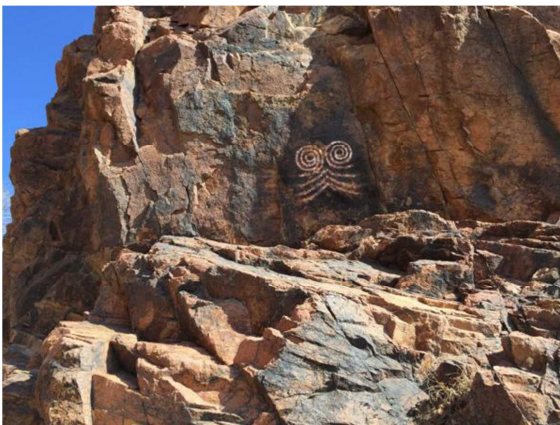
a pair of three-circle swirling patterns. It may seem to be a cautious word of the cloud in the "Shuo Wen Jie Zi" Oracle bones; the following is composed of three water ripples, which may seem cautious. The words of the water in Oracle's "Shuo Wen Jie Zi". The Swedish sinologist Cecilia Lindquist (Chinese name Lin Xili) put together a variety of writings in water, rivers, and prefectures in her "Kingdom of Chinese

Characters" p584[4]. The three characters are related to river water. Water and Kawase are very appropriate in the rock paintings. The structure of the rock paintings is clear and smooth, with smooth and graceful lines. They look far away from the big eyes of a pair of gods and peep into the endless stream of water on the west (Figure 2).



**Figure 1.** The geographical location of cloud and water texture (Chifeng, China).

The rock paintings exhibiting water vortices are mostly on the banks of the inland rivers and on the circum-Pacific coast. Most of them appear as single vortex patterns, some of which are concentric circles of [5-10] and some of which are vortices [11-16]. The whirlpool painting lines in the double bodies [17-25] and above rotate in the same direction [26, 27], and no symmetric whirlpool-like face rock paintings in the Hongshan cultural area have been found. This posture is unique to the Hongshan cultural region. However, this special shape was not disclosed in the excavation report of the Xiajiadian Site in detail [28], and was not disclosed in the report on excavated earthenware found in the Hongshan Cultural Site [29].



**Figure 2.** Rock Art Paintings Behind Hongshan Mountain.

There are 11 star-point rock paintings on the red granite

platform 50 cm below the Hongshan Yun Shui Wen Ren Hua Yan rock paintings. They are distributed in the area of the Yangtze River Delta, where the height is 70 cm, the width is 44 cm, and the stars are large. The diameter of 4 cm, the depth of 2 cm, the small diameter of the star hole 2 cm, depth 1 cm, they are arranged in order, is the sky map, or a combination of pictographic symbols, has not yet resolved a satisfactory answer.

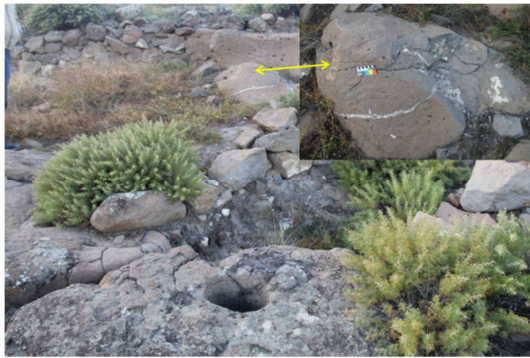


**Figure 3.** The first spot of cloud and water texture rock paintings in Sanzuodian(place).

## 2.2. Three Shop Rock Paintings

Three shop rock paintings, four rock carvings in total, of which two clouds and water-faced face rock paintings (excluding quartz crystals) face the southeast Yin River. The

first cloud and water texture rock paintings is carved on the gray sandstone. The rock painting is located on the Xiajiadian lower cultural site wall base. The rock paintings are 48 cm high and 43 cm wide. The carving is sharp and the groove width is 1.5. Centimeter, depth 0.5-1 cm (Figure 3). The second cloud and water texture rock paintings is 15 meters away from the first rock painting. The rock paintings are carved on the gray sandstone. This cloud and water texture rock paintings is 60 centimeters high and 85 centimeters wide. (Figure 4).






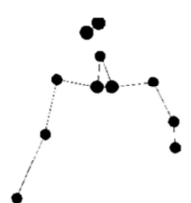


**Figure 4.** The Second spot of cloud and water texture rock paintings in Sanzuodian(place).

There are two rock carvings on the north side of the cloud and water texture rock paintings: The first cave rock carving is near the first human face rock painting, and the star cave rock face is 129 cm wide and 90 cm high, and it is 1.16 square meters. Above the gray sandstone, there are 40 artificially etched stars (Figure 5).



**Figure 5.** Asterescens rock carving near the cloud and water texture rock paintings in the first location of Sanzuo shop.

rock painting site	cloud-textured human face image	cloud-textured human face image nearby the sinking-hole-shaped
San Zuo DianSmy1		
San Zuo DianSmy2		
San Zuo DianHmy1		

**Figure 6.** Sanzuodian, the cloud and water texture rock paintings Behind Hongshan Mountain Petrography and Xinguyan Rock Engraving System.

The second starhole was engraved at a distance of 1.5m from the north of the second human face rock painting. The starhole was carved on three fractured gray sandstones. The starhole facet was 208cm long and 57cm high at 1.19. There are 22 artificially engraved crests on the average limestone sandstone (Figure 6).

### 2.3. Hongshanhou Colored Pottery

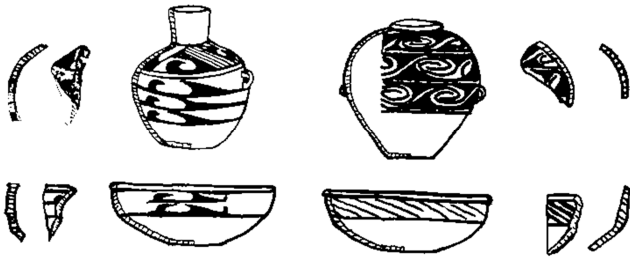
The Japanese East Asian Archaeological Society of Hongshan was discovered here from 1935-1938. The

excavation report of Chifeng Behind Hongshan did not mention ancient rock paintings. The researchers found many red mountain cultures during the period of Hongshan Culture. The shape of the residual terra cotta was restored to the same shape as the excavation report of [29] of Chifeng Behind Hongshan (Figure 7).

The performance of the cloud and water patterns on rock paintings and pottery means that the ancient people expressed abstract and general representations of their natural environment and resources. The performance of water ripples



stems from the desire of life for water. Water is the source of life. The survival of human beings cannot be separated from water. The early nomadic peoples had habits and traditions of living by the plants. Not so much "traditions", it would be better to say that making rock art is an indispensable best way to express life and reproduce the race.



**Figure 7.** Restoration of colored pottery fragments and artifacts collected from the Hongshan cloud slate rock paintings.

Note: residual pottery film Behind Hongshan rock painting site collection, in the middle of pottery restoration map

The cloud water swirl vortex pattern human face rock painting is currently the first case at home and abroad. The cloud water vortex pattern pottery that appeared in the Yellow River Basin and the West Liaohe River Basin generally follows the same direction as the whirlpool pattern, unlike the Hongshan Mountain. Three shops rock symmetry, the ancient personification of the cloud Shuiwen lines, freehand brushwork, should be the fear of God in the eyes of the ancients. There are no stars in the sky near the awe-inspiring totem, and the three-faced Shuizhuang human face resembles the shape of the rock. The shape of its neighboring stars is different. It should be a description of people's mind-set stars or the sky stars. What is the meaning of it is still unknown.

### 3. The Age of Petroglyphs

The author and according to the dating equipment, procedures and methods used by international rock art organizations (Note 2) succeeded in the post-Hongshan rock paintings, the Yuan Dynasty Jigong Zhang Yingrui gravestones, the Yuan Dynasty chiefs Zhang choulv tombstones, Yuan Dynasty Quanning Road Confucianism monuments. The helium that was rich in quartz crystals was recorded in scientific years, and scientifically no damage was taken to extract macroscopic sample data.

#### 3.1. Water and Cloud Texture Human-Faced Rock Painting in Hongshanhou

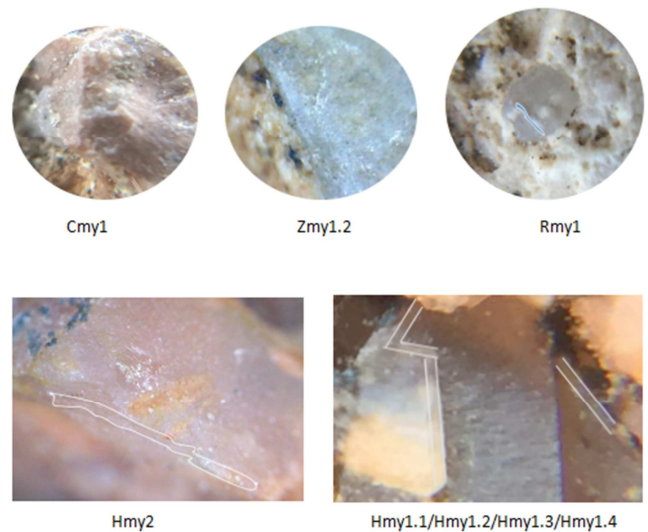
The Hongshan cloud and water texture rock carving (code name Hmy1.1-1.4) measured four points (Table 1, Figure 8). The water ripple is 18 cm high, 40 cm wide, and the groove width is 1.8 cm. At a depth of 1.0 cm, the quartz crystal appears in the groove on the right side of the second water ripple, and there are four crystals with measurable points. The crystal is slightly attenuated at a 90° angle, and the four-point attenuation is accurately measured. The result is :

Hmy1.1 left oblique vertical point length 56 and width 14μm. The Hmy1.2 transverse point is 87 in length and 14 μm in width. The vertical point in Hmy1.3 is 187 and 14 μm in width. Hmy1.4 right oblique point length 211, width 14μm. The average width of the four points is 14 μm and the total length is 211 μm.

#### 3.2. Star-caved Rock Painting in Hongshanhou

The second starhole rock carving on the red granite platform at the left side of the 50cm radius below the cloud and water texture face rock painting of the Hongshan Houxingxue rock carving (codename Hmy2). 2.2 centimeters in depth and 1.5 centimeters in depth (Table 1, Figure 8). There are crystals 0.5 centimeters from the center of the celestial ridge. The angle of 90 degrees is suitable for microetching measurement. The crystal has slight attenuation, and the nine segments are accurately measured according to changes in the attenuation curve. The length is 330 μm and the widths are: 15, 11, 17, 12, 17, 12, 11, 12, 15 = 122/9 = 13.6 μm (simple average), and the weighted average micro-etching width is  $13.9 \approx 14 \mu\text{m}$ .

Microrystalline erosion pattern of five sites in microscopic perspective



**Figure 8.** Phenomenon of micro-etching state of quartz crystals in five sites.

### 4. Introduction to the Three Years of Quanning Road and Micro-etching Results

Cmy1 is ugly and unwitting, and the chief executive of the Yuandu Capital Administration passed away and died in the second year (1336). In the same year, he built a tomb in the archaeological village of Wudan Town, Quanning Road (now Wengniute Banner). The monument is rich in quartz crystals. Cmy1 is a quartz crystal micro-corrosion sample [30, 31] (Table 1, Figure 9) in the Yuan Dynasty "All Ning Zhang first inscription".

Rmy1 Yuan Dynasty Quanning Lu Xiang Gegeji Grand

Princess (Yuanshun Zongnü, Wu Zongmei, Renzongzi, Wenzong Mother-in-law) She was in the Yuantai Ding two years (1325) in Quanning Road (Wudan Town, Wengniute Banner) Confucianism The school built the "Jinning Lu New Confucian School Record" monument, and the figure Rmy1 is the quartz crystal micro-corrosion sample in the Yuan Dynasty's "Jinning Lu New Confucian School Record" [32] (Table 1, Figure 9).

Zmy1.2 Zhang Yingrui, Yuanning Quanning, the chief manager of the Luwangcheng General Administration Office, and reclaiming the government of the state, Yuantong three years (1335) to build a tomb in the Pinglou Village of Wutong County, Wutongniu Town. The monument is rich in quartz crystals. Figure Cmy11.2 is a micro-corrosion sample of quartz crystals in the Yuan Dynasty's "Zhang's First Monument" o [33] (Table 1, Figure 9).

### Measurement of micro-etching points in the monument of the Quanning Road in Yuan Dynasty

1 Yuan Dynasty Zhang chou Lv Monument

2 Yuan Dynasty Confucianism Monument

3 Yuan Dynasty Zhang Ying rui Monument



Figure 9. Measurement of micro-etching points in the monument of the Quanning Road in Yuan Dynasty.

The above-mentioned three monuments in the Yuan Dynasty are located in the Hongshan Cultural Area, and are less than 100 kilometers from Hongshan Later Rock Art. The natural geography and climatic conditions are the same, and the measurement data are comparable. To this end, we calculated the quartz micro-corrosion calibration coefficients (Zmy1.2, Cmy, Rmy, Table 1) at the three sites of Quanyin

Road in the Yuan Dynasty to be  $2.8 \mu\text{m/ka}$ . The face rock painting production time is E5000, (Note: "E" here, ie, erosion, said from the figure of the data of this year's figure 10); Hongshan Houxingxue rock painting age E5000 +1071/-1071, the age range is 6071 - Between 3929 (Figure 11), the age of post-Hongshan rock painting belonged to the late period of the Red Mountain Culture.

Table 1. Five places in Hongshan Cultural District Sample micro-etching crystal test table.

1 Code	2 Test the venue	3 Rock carving name	4 position	5 Oriented	6 Angle	7 Weighted average width	8 length	9 AD/EPOCH
Zmy1.1	ZYR	Stone turtle	Front neck	Zhengxi	90	1.91	46	1335/682
Zmy1.2	ZYR	Stone turtle	Front neck	Zhengxi	90	1.91	66	1335/682
cmy	ZCL	Stone turtle	Back	Zhengxi	90	1.91	118	1336/681
Rmy	CFI	Right abdome	Back	Zhengxi	90	1.94	65	1325/692
Hmy1.1	HSH	Human face	Bottom right	Zhengxi	90	14.0	56	E/5000
Hmy1.2	HSH	Human face	Bottom right	Zhengxi	90	14.0	87	E/5000
Hmy1.3	HSH	Human face	Bottom right	Zhengxi	90	14.0	187	E/5000
Hmy1.4	HSH	Human face	Bottom right	Zhengxi	90	14.0	211	E/5000
Hmy2	HSH	Star cave	Zhengnan	Zhengnan	90	14.0	264	E5000+/-1071

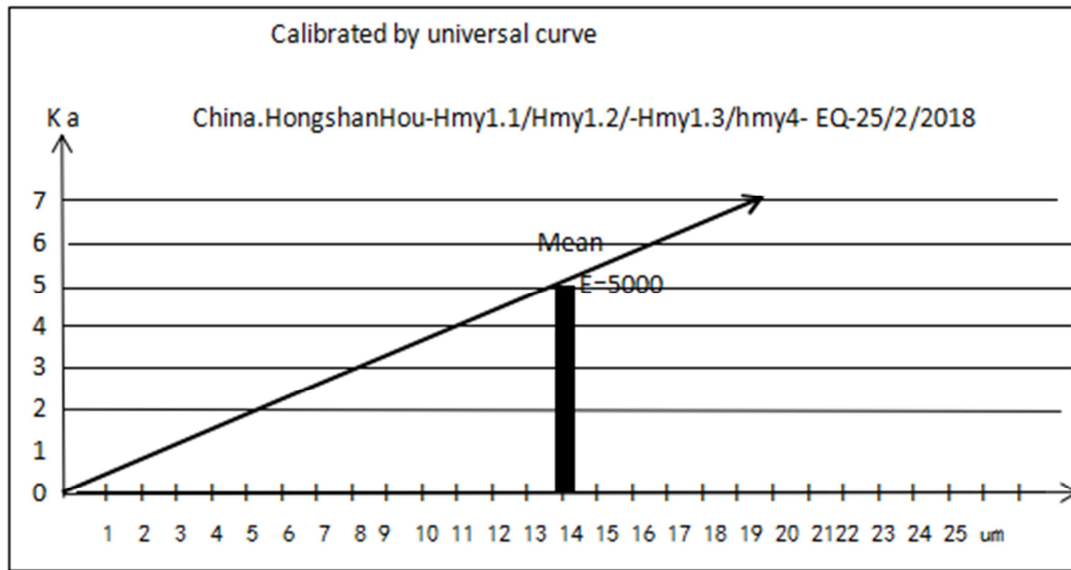


Figure 10. Calibration curve of quartz crystal micro-decay with water-cut human face image.

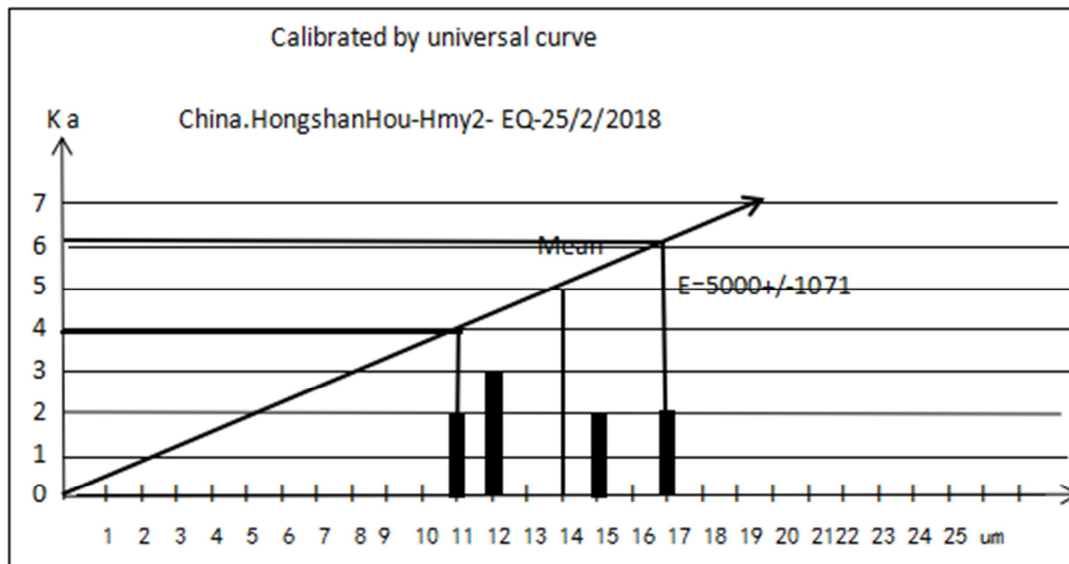


Figure 11. Starhole rock inscription Quartz crystal micro-decay calibration curve.

## 5. Conclusion

The cloud and water texture human Face Rock Paintings are distributed in the upper reaches of the Lao Ha River. According to the rock art materials published in the world and rock art materials provided by the international rock art website, it is currently verified that in the world, the cloud and water texture human Face Rock Paintings in Xiang Yan Shi is in three shops and red. There are only three in the back of the mountain, and it is formed on the Yin River, the Yingjin River, and the Laohe River. It belongs to a unique form of rock painting in northern China. The Shuiyun lithograph is not isolated. It is also linked to the star caves. The celestial caves should be related to the sky constellation at that time. The silhouette-free, water-sweeping face of the

Shuiyun pattern is combined with the sky stars to form a scroll between the heavens and the earth, especially on the steeply-defined stone cliffs behind the Red Hill. The composition of the stars is not simple and arbitrary. The whole figure contains secrets. It is to pray for heaven and earth's spirits to spill nectar on the world's rain, or to pray for the gods engraved on the banks of the river to bless this land of hot people from flooding. This secret There is no conclusion yet. However, we analyze from another aspect of rock art. This special cultural form symbol contains the initial form of the word "Cloud, Water, and Chuan" in Oracle. This unique literary character structure plays an important role in the formation of the initial writing, the role of the divine grid, the evolution and propagation of decorative graphics, and the study of ancient constellation shape and change. The age of

petroglyphs was comprehensively measured by scientific methods such as micro-etching of crystals. It was about 5,000 years ago and it belongs to the late period of the Neolithic Hongshan Culture.

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