

仙女 And
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Selected Paintings on China's Space Exploration
Flying with the wings of art
让太空探索插上艺术的翅膀

中国航天成就绘画作品精选
祝贺中国第一个航天日 2016年4月24日

Sponsored by: China National Space Administration
Undertake by: Regional Centre for Space and Technology Education in Asia and the Pacific(China);
Beihang University
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序

中国自古就有嫦娥奔月的美丽传说，有万户飞天的勇敢探索。1970年4月24日，中国第一颗人造卫星“东方红一号”发射成功，实现了中华民族千年飞天梦想，也踏上了中国人进入太空、探索宇宙的新征程，相继取得了载人航天、月球探测等举世瞩目的辉煌成就。近日，中国政府正式批准，自2016年起，将每年4月24日这个具有代表性、纪念性的日子设立为“中国航天日”。

2015年6月，中国国家航天局、联合国附属空间科技教育亚太区域中心（中国）在维也纳联合国外空委总部莫扎特厅举办了《让太空探索插上艺术的翅膀—中国航天成就绘画作品展》。值此首个“中国航天日”到来之际，我们精选画展的部分作品，结集成册。

希望通过本画册，展现航天工程发展的成就和文明智慧的成果，让航天科技插上艺术的翅膀，飞向人类太空探索的美好未来。

中国国家航天局局长



2016年4月24日

Preface

Since ancient times, Chinese people have spread beautiful legends like "Chang'e flight to the Moon" and tried to make such brave explorations like "Wan Hu's flying to the sky". On April 24th, 1970, "Dongfanghong I", China's first artificial satellite was successfully launched, which accomplished the nation's flying dreams that haunted for thousand years. Since then, China stepped on a new journey of entering space and exploring the space, and made remarkable achievements one after another like manned space flight, lunar exploration, etc. Recently, the Chinese government formally approved to make April 24, this representative and memorable date, as "Space Day of China" since 2016.

In June, 2015, "Painting Exhibition on China's Space Exploration—Flying with the Wings of art", which was hosted by China National Space Administration and organized by Regional Centre for Space Science and Technology Education in Asia and the Pacific(China) (RCSSTEAP), was held successfully in the Mozart Hall of Vienna International Center. On the occasion of the first "Space Day of China", drawings handpicked from the Painting Exhibition have been published in book form.

We hope to present our achievements on space explorations and fruits of human wisdom and civilization through this picture book. Wish the aerospace science and technology can get the wings of art, fly to a bright future of space exploration.

XU Dazhe
Administrator of CNSA

April 24, 2016

Down to the Earth while Aiming High



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Observing the Sky from the Ground

坐地观天

Early from the Stone Age (about 4500 years ago), Chinese ancestors began observing the sun, the moon and other astronomical phenomena, and engraved their images and graphic patterns on pottery wares. They meditated sitting by the sea or looked up into the starry sky on the hill. Man invented telescopes in the 17th Century. With the help of such scientific instruments, outer space was observed. For most of the human history, they are in a period of observing the sky from the ground.

中国先民早在石器时代(距今4500年前)就对日、月等天象开始了观察,并在陶器上刻绘了日月的形像图案。或坐在海边冥思苦想、或在山上仰望星空,到了公元17世纪,人类发明了望远镜,从而实现借助科学仪器观测太空。人类有生以来的大部分时间里,可以说处于坐地观天的时代。



Chang'e flight to the moon & Kuafu running after the sun

“嫦娥奔月”和“夸父逐日”

Chang'e's flight to the moon is one of Chinese legends and myths. It tells us a story that Chang'e swallowed two pills for immortal life, which was gifted to her husband Houyi by Queen Mother of the West, so that she was condemned to fly to the palace of the moon. The legend goes that every night of full moon on the 15th August by lunar calendar, Chang'e will return from the moon and reunite with her husband Houyi.

It is said that during the Huang Emperor Dynasty, one tribe head named Kuafu was eager to pick the sun off and put it into people's heart. So he kept running after the sun, drinking from rivers while thirsty. Later, he drained the Yellow River and Wei River dry, and died on the way to the sun. His body is said to be turned into Kuafu Mountain and his walking stick into a Peach Blossom Land.



The Cowherd and the Weaving Maid

“牛郎织女”

The Cowherd and the Weaving Maid is one of the four love folk stories in China. Long long ago, a cowboy, who was a poor orphan, and his cow depended on each other for survival. The cow was of magic power, and primed the cowboy to marry the fairy maiden, who came down to the earth without permission. The couple, the cowboy and the fairy maiden, loved each other, man cultivating and woman weaving. And they had a son and a daughter. But the weaving maiden is recaptured back to the heavenly palace later. She missed her husband and children very much. After her continuous efforts, they were permitted to meet on the Milky Way on the 7th July by lunar calendar every year. And the date is considered as Chinese Valentine's Day.

牛郎织女是中国四大民间爱情传说之一(略)



ECLIPTIC ARMILLA

黄道经纬仪

Made in 1673 for the purpose of determining ecliptic longitude difference and latitude of celestial bodies as well as the 24 Solar Terms.

制于清代康熙十二年（公元1673年）。主要用于测定天体的黄经差、黄纬和二十四节气。



ALTAZIMUTH THEODOLITE

地平经纬仪

Made in 1715 for the purpose of determining azimuth and altitude of celestial bodies.

制于清代康熙五十四年（公元1715年）。主要用于测定天体的方位角和地平高度。



SEXTANT

纪限仪

Made in 1673 for the purpose of measuring the angular distance between any two stars less than 60° apart as well as the angular diameters of the sun and the moon.

制于清代康熙十二年（公元1673年）。可用于测定60°以内任意两颗天体的角距离和日、月的角直径。



EQUATORIAL ARMILLA

赤道经纬仪

Made in 1673 for the purpose of determining true solar time as well as the right ascension difference and declination of celestial bodies.

制于清代康熙十二年（公元1673年），主要用于测定真太阳时，天体的赤经差和赤纬。



SIMPLIFIED ARMILLA

简仪

Made in 1439 and used for the same purpose as Armillary Sphere, it is simpler in structure and operation. It was moved to the Purple Mountain Observatory in Nanjing in 1933.

明正統四年（公元1439年）铸造。原为我国元代天文学家郭守敬所创造，该仪器在构造和使用上都比浑仪来得简单，原存北京，于1933年运往南京紫金山天文台。



ARMILLARY SPHERE

浑仪

Made in 1439 for the purpose of determining coordinates of celestial bodies, it was originally kept in Beijing and was moved to the Purple Mountain Observatory in Nanjing in 1933.

明正統四年（公元1439年）铸造。可以用来测定天体位置。该仪器原存北京，于1933年运往南京紫金山天文台。



NEW ARMILLA

玑衡抚辰仪

Made in 1744 for the purpose of determining true solar time as well as the right ascension difference and declination of celestial bodies.

制于清代乾隆九年（公元1744年），主要用于测定真太阳时，天体的赤经差和赤纬。



Sundial

日晷

Made in 1439 for the purpose of determining coordinates of celestial bodies, it was originally kept in Beijing and was moved to the Purple Mountain Observatory in Nanjing in 1933.

明正統四年（公元1439年）铸造。可以用来测定天体位置。该仪器原存北京，于1933年运往南京紫金山天文台。



Chinese Moondial

月晷

Moondial (Tai Yin Gui) is used to determine time through observation on the directional changes of the moon. It consists of two concentric disks and a vernier in the center. The vernier is used for indicating the time according to the moon.

月晷又名太阴晷，是通过观测月球方位的变化来测定时刻的仪器。它由两个同心圆盘和中心游表三部分组成。其中一盘标有农历初一至三十日的日期，称为日盘；另一盘标有十二时辰，称为时盘。

游表用来对准月亮指示时刻。



THE QUADRANT

象限仪

Made in 1673 for the purpose of determining altitudes or zenith distances of celestial bodies.

制于清代康熙十二年（公元1673年），主要用于测定天体的地平高度或天顶距。



Dong Fang Hong No. 1 launched

卫星上天

On April 24, 1970, "Dong Fang Hong No.1", the first artificial earth satellite, launched in Jiu Quan. China became the fifth country which has launched satellite in the world.

1970年4月24日，第一颗人造地球卫星“东方红”1号在酒泉发射成功，中国成为世界上第五个发射卫星的国家。



“Shen Zhou” spacecraft flew to the outer space

神舟升空

On October 15, 2003, that Yang Liwei, the first astronaut in China went into space by “Shen Zhou” spacecraft realized Chinese flying dream.

2003年10月15日，中国第一位航天员杨利伟乘坐神舟五号飞船进入太空，实现了中华民族千年飞天梦想。



BeiDou Navigation Satellite System

北斗导航

BeiDou Navigation satellite System (BDS) is a global satellite navigation system independently developed by China. On December 27, 2012, BeiDou Navigation Satellite System formally provides passive location, navigation and timing services to the Asia-pacific region.

北斗卫星导航系统 (BeiDou Navigation Satellite System, BDS) 是中国自行研制的全球卫星导航系统。2012年12月27日，北斗导航业务正式对亚太地区提供无源定位、导航、授时服务。



Chang'e probing into the moon

嫦娥探月

A trip to the moon is thought to be impossible. Nevertheless, the development of modern space technology make it feasible. The legendary jade hare is of the modern form and shape.

登月常被人们认为是不可能的事。然而，现代空间技术的发展已使之成为可能。中国传说中玉兔，已有了现代的模样。



Stepping into the outer space and inspecting it

登天察天

With the help of aeroplane, hot air balloon, and man-made satellite, remote – sensing and observation to the earth are realized, and so as to the outer space.

Man has entered a new era - the Era of Insight into the Earth and the Space after stepping into the outer space.

借助于飞机、热气球、人造卫星等，实现对地遥感和观测，也可实现对深空探测。人类进入了登天察地和登天察天的新时代。



Chinese extravehicular activities in space for the first time

中国首次空间出舱活动

On September 27th, 2008, by Chinese Shenzhou VII manned space flight, Chinese astronaut ZHAI Zhigang realized the extravehicular activities in space for the first time.

2008年9月27日，中国“神七”载人飞船航天员翟志刚顺利出舱，实施中国首次空间出舱活动。



Saying hello to the whole world

挥手之间

At 16:43 September 27th, 2008, Chinese astronaut ZHAI Zhigang was saying hello to the whole world, waving the Chinese national flag.

2008年9月27日，16时43分，中国航天员翟志刚挥动中国国旗，向全世界人民问好。

艺术与科学是车之双轮、鸟之双翼

Art and science is the wheels of the car and the two wings of a bird



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