





太空旅客 (SPACE TRAVELLERS) , 遨遊太空是人類一直以來的夢想, 實現這一個挑戰

性的旅程, 曾經歷過一系列的探索, 從身穿的宇航服到乘坐的火箭, 從太空生活的方式到登錄月球的指引。

### SPACE TRAVELLERS

## HISTORY OF SPACESUITS

Spacesuits provide vital protection for astronauts. There are two basic types: spacesuits worn inside a spacecraft, and spacesuits worn outside. An outside spacesuit is like a small spacecraft with all of the vital life-support systems needed for survival. Here is how spacesuits have developed over time...

**DRESSED TO IMPRESS**  
Spacesuits can look quite chunky. This is because they are made from up to 15 layers, including:

- ON THE OUTSIDE: MULTIPLE LAYERS OF PROTECTION TO PROTECT FROM THE SUN'S RAYS
- HEAT-RESISTANT LAYERS TO PROTECT FROM RADIATION AND OTHER DANGERS
- PROTECTION TO PROTECT FROM METEORITES AND OTHER DANGERS
- HEAT-RESISTANT LAYERS TO PROTECT FROM RADIATION AND OTHER DANGERS
- BLANKETS TO KEEP THE SUIT WARM AND TO PROTECT FROM RADIATION AND OTHER DANGERS
- ON THE INSIDE: MULTIPLE LAYERS OF PROTECTION TO PROTECT FROM THE SUN'S RAYS
- HEAT-RESISTANT LAYERS TO PROTECT FROM RADIATION AND OTHER DANGERS
- PROTECTION TO PROTECT FROM METEORITES AND OTHER DANGERS
- HEAT-RESISTANT LAYERS TO PROTECT FROM RADIATION AND OTHER DANGERS
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**PARTS OF A SPACESUIT**

- LIGHTS AND TV CAMERA
- COMMUNICATIONS SYSTEM
- PORTABLE LIFE SUPPORT SYSTEM
- TEMPERATURE CONTROL
- HEATED GLOVES

**1959 MERCURY SPACESUIT**  
The earliest spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**1961 SK-1 SPACESUIT**  
The Skylab Airlock (SK-1) spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**1965 GEMINI SPACESUIT**  
The Gemini spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**1966 APOLLO SPACESUIT**  
The Apollo spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**1968 SPACE SHUTTLE SUIT**  
The Space Shuttle Suit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**1994 Z-2 SPACESUIT**  
The Z-2 spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**2008 FEITIAN SPACESUIT**  
The Feitian spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

**2020 Z-2 SPACESUIT**  
The Z-2 spacesuit was designed to protect astronauts from the vacuum of space and the heat of reentry. It was made of a single layer of aluminum foil and was very hot to wear.

探索太陽系 (EXPLORING THE SOLAR SYSTEM) , 我們離開地球後就將探索太陽系中

的奧秘, 由太陽到八大行星, 不同的星體都有不同的特點, 值得我們好好研究。

### EXPLORING THE SOLAR SYSTEM

## THE SUN

A massive ball of hot burning gases, the Sun is Earth's most important celestial neighbour. It provides the energy that allows all life on our planet to exist, but it is also violent and variable, expelling flares, radiation, the solar wind and coronal mass ejections. Missions investigating the effects of the Sun on the planets are of great importance.

**SOHO**  
The Solar and Heliospheric Observatory (SOHO) was launched in 1996 to orbit 1.5 million km (930,000 miles) from Earth. SOHO has provided us with the most detailed and complete view of the Sun ever. It has also provided the discovery of numerous new comets passing close to the Sun. SOHO will continue to provide new data to people searching SOHO images online.

**Hinode**  
In 2006, Japan's Hinode satellite was sent to investigate the Sun's extremely hot outer atmosphere, called the corona. Scientists used the solar wind data to help predict when the coronal hole will erupt and how much solar activity will be produced. The mission is expected to end in 2012.

**IRIS**  
The Interface Region Imaging Spectrograph (IRIS) was launched in 2013 to observe the Sun's atmosphere. It is the second of three orbiters in the Sun's atmosphere, which means other material in the corona and flares interacted with the corona and flares. IRIS will provide solar images and spectra in the visible and ultraviolet light. The mission is expected to end in 2022.

**PARKER SOLAR PROBE**  
Launched in 2018, the Parker Solar Probe will travel as close as 61 million km (37 million miles) to the Sun's photosphere (its visible surface) in 2025. This is the closest to the Sun that any spacecraft has ever been before. The probe will make the outer portion of the Sun heat every year to provide never-before-seen views of the corona and investigate the origin of the solar wind.

**THE TRAVELLER'S GUIDE TO THE SUN**  
The two pressing problems preventing mankind from going to the Sun are heat and light. The Sun is so hot that it would melt anything that got too close to it. Yet it is also so bright that it would blind anything that got too close to it. The Sun is so big that it would take a long time to get there. The Sun is so big that it would take a long time to get there. The Sun is so big that it would take a long time to get there.

**EARTH SATELLITES**

- ORBITING SOLAR OBSERVATORY (OSO) 1962-1970
- SOLAR MAXIMUM MISSION 1980
- YOKOHAMA 1991
- GEOTAIL 1992
- TRANSITION REGION AND CORONAL EXPLORER (TRACE) 1998
- Hinode 2006
- SOLAR DYNAMICS OBSERVATORY (SDO) 2010
- INTERFACE REGION IMAGING SPECTROGRAPH (IRIS) 2013

**ORBITERS**

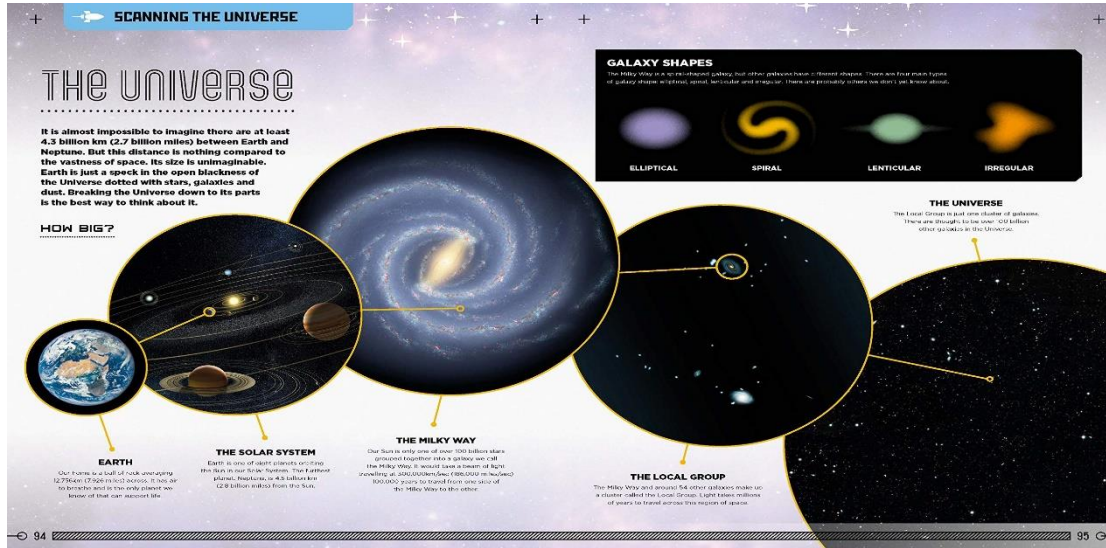
- HELIOS (AND HELIOS B) 1974/1976
- ULYSSES 1990
- SOLAR AND HELIOSPHERIC OBSERVATORY (SOHO) 1996
- ADVANCED COMPOSITION EXPLORER (ACE) 1997
- GENESIS 2001
- SOLAR TERRESTRIAL RELATIONS OBSERVATORY (STEREO A & B) 2006
- PARKER SOLAR PROBE 2018

**THE SUN**

- AGE: 4.5 BILLION YEARS
- STAR TYPE: YELLOW DWARF
- COMPOSITION: HELIUM AND HYDROGEN
- AVERAGE DIAMETER: 1,392,684 km (864,933 miles)
- TEMPERATURE AT SUN'S CORE: 15,000,000°C (27,000,000°F)
- 1.3 MILLION EARTHS COULD FIT INSIDE THE SUN
- THE SUN MAKES UP 98.8% OF THE MASS OF THE ENTIRE SOLAR SYSTEM
- IT TAKES THE SUN APPROXIMATELY 230 MILLION YEARS TO COMPLETE ONE ORBIT OF THE CENTRE OF THE MILKY WAY



細看宇宙 ( SCANNING THE UNIVERSE ) ，無窮的宇宙充滿著各種未知的事物，是否有外星人？是否能進行星際旅行？人類仍努力通過不同的方式認識我們身處的太空。



推介的原因：

本書內容翔實且生動，配圖豐富而有趣，通過大量精心編排的圖片，提升朋友對太空探索的興趣。THE COMPLETE GUIDE TO SPACE EXPLORATION 適合太空愛好者初步了解人類認識、探索、發現宇宙的歷程。該圖書結構嚴謹，圖文並茂，資料清晰，重點明確。

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Since 1970

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