南极向你招手

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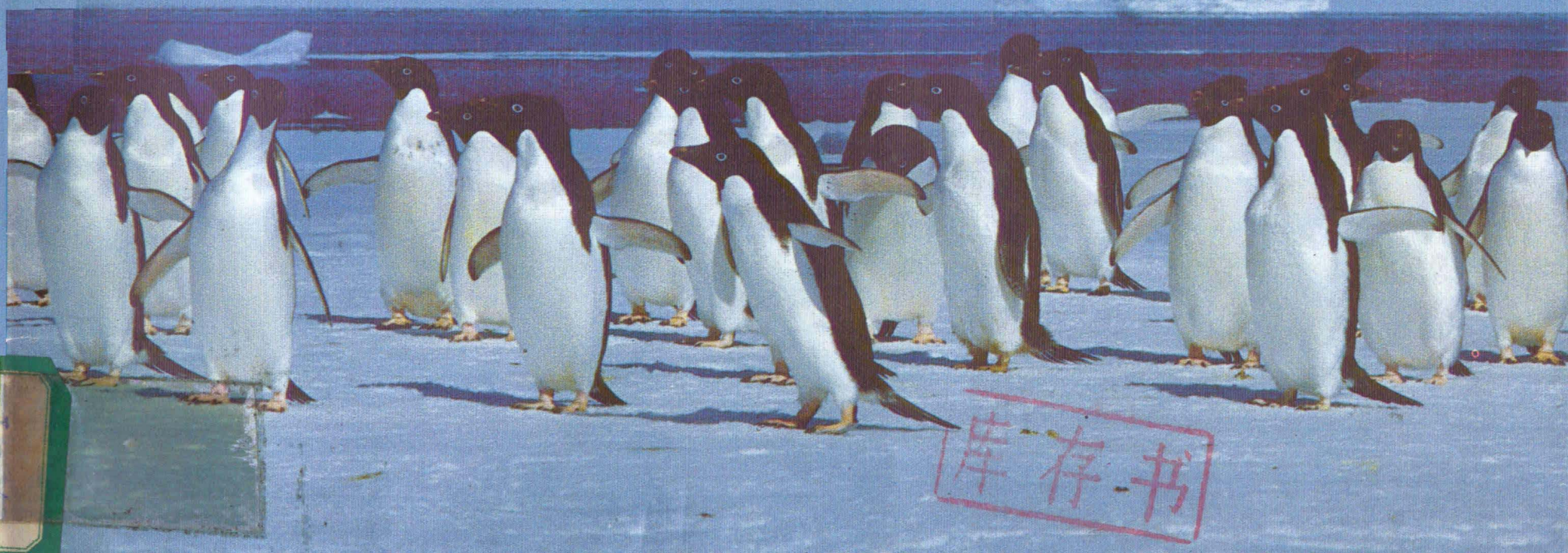

WELCOME TO THE ANTARCTIC

浙江人民美术出版社


WELCOME TO THE ANTARCTIC

南极向你招手

WELCOME TO THE ANTARCTIC

浙江人民美术出版社

为人类和平利用南极做出贡献。

邓小平 一九八四年
十月十五日

Make contributions to the peaceful uses of Antarctica for humanity.

Deng Xiaoping

Oct. 15, 1984.

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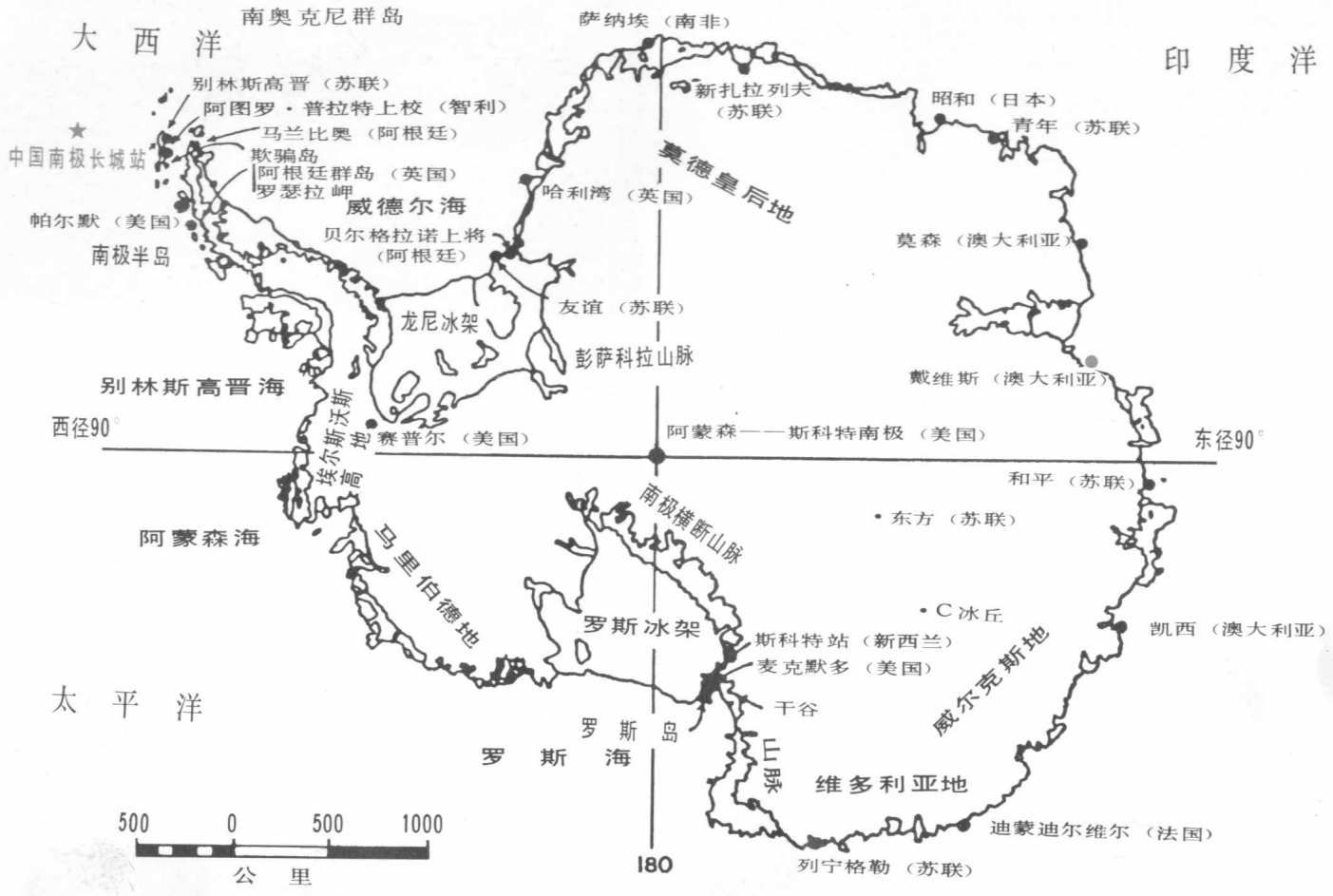


南 极 地 形 和 部 分 极 地 站

Antarctic topography and a part of research stations in Antarctica

★ 中国南极长城站

China's Great Wall Station on the Antarctic

难得的好天气，令人心旷神怡！这里就是南极。 *A fine day in the Antarctic. How carefree and joyous one feels on such a rare occasion!*

南极！企鹅的故乡。 *The home of penguins.*

南极人的盛装。
They dressed in their best.

南 极 向 您 招 手

南极是地球上一块未被开发的宝地。它位于地球最低端的冰雪高原，据现有资料表明，南极大陆和附近岛屿的陆地面积为1,246万平方公里，周围冰架面积约为158万平方公里，总面积为1,404万平方公里，占全球陆地面积百分之九点四。大陆平面形态象一只蝌蚪。大陆本土以南极极点为圆心，大致以南纬70°为圆周，直径为4,500公里。它距南美洲约1,000公里，距澳大利亚约3,500公里，从非洲到南极约4,000公里，从上海到南极，航程超过两万公里。它的特殊自然条件对于了解地球整体环境有着极其重要的意义，特别是在气象、海洋、地球物理、无线电通讯等方面，对其它大陆都有着直接的影响。

地球是一个整体，南极大陆有百分之九十五的陆地为冰雪复盖，是全球最高的大陆，平均海拔为2,350米，最高的山峰——文森山岳海拔为5,140米。南极也是全球最冷的地区，被称为地球上的“寒极”，常年平均气温为－25℃，比北极还要低12℃，最冷时达到零下80余度。冰盖厚度平均约2,000米，最厚的冰层达4,800米，冰盖的总体积为2,450万立方公里，约占地球上淡水的90%，是世界上最大的天然冰库。有人推算，假如南极冰盖全部融化，世界洋面得要升高60米。南极也是地球上最干燥，风暴最多，风速最大的大陆，它的沿海地区年降水量200—300毫米，和我国内蒙古、宁夏地区相当，大陆内部年降水量只有30—50毫米，与非洲撒哈拉沙漠差不多，所以人们称这个茫茫冰源为“白色的沙漠”。南极冬季约有1/3的大风天气，风速常达40—50米/秒，最大时达100米/秒，大大超过12级风。南极对全球气候有直接影响，要提高长期天气预报的准确性，就必须了解全球大气循环机制，就离不开南极的气象资料。要发展宇航事业，就必须掌握大气中电离层的情况，但由于我国地理位置的局限，无法在本国获得高纬度地区电离层资料；而在南极开展地球物理方面的观测，便可以得到弥补。环饶南极大陆的南大洋，被称为世界第五大洋，它和太平洋、印度洋、大西洋的水域是沟通的。南大洋又是当今地球上唯一没有被污染的海洋，对太平洋、印度洋影响很大。

南极不仅是世界上得天独厚的“天然实验室”，而且资源十分丰富，是个巨大的“资源宝库。”在冰雪复盖的地下和大陆架，蕴藏着极其丰富的石油、天然气，还有煤、铁、铜、金、银、铀、锰等二百多个矿藏品种。南大洋生物资源蕴藏量更加可观，除有富饶的鱼、鲸、海豹、乌贼外，光富高蛋白的磷虾，估计储量可达50亿吨之多。是人类未来的动物蛋白仓库。

公元二世纪，世界上就流传着“未知的南方大陆”的传说，十八世纪后期，为了寻找这块“南方乐土”，探险家们开始了探索南极的艰险历程。但南极的秘密被逐步揭开，是从本世纪五十年代才开始。现在全世界已有十六个国家在南极建立了四十多个常年考察站和一百多个夏季站，而我国对南极的考察事业是八十年代才兴起的，迟于世界上许多国家；一九八〇年一月以来，我国先后应澳大利亚、新西兰、智利、阿根廷和日本的邀请，派出了三十二人，四十人次登上南极洲，从而开创了我国南极考察的先声。我国还派代表出席了南极研究科学委员会第十六、十七、十八次会议，以及南大洋生物资源会议和第四届国际南极地学讨论会。一九八三年五月九日，五届人大常委会第二十七次会议还通过了我国加入《南极条约》的决定；同年九月，我国政府代表团第一次出席了《南极条约》会议，正式成为条约的成员国之一。国际南极机构有两大组织，一是属于国际学术界的南极研究科学委员会，一是属于政府间的组织——南极条约协商国。由由于我国没有在南极建立自己的考察站，所以在联合国五个成员国中，唯我国不是南极条约的协商国，在许多重大问题上没有发言权；因此；这次在南极建立考察站意义十分重大。

我国首次派赴南大洋和南极的科学考察队，乘《向阳10号》科学考察船于1984年11月20日从上海启航。到达南极后，经过考察队员的艰苦奋斗，中华人民共和国第一座南极科学考察站——中国南极长城站终于在1985年2月20日在乔治岛上隆重落成，五星红旗庄严的飘扬在南极洲上空，这标志着我国南极科学考察事业进入一个新阶段。填补了我国科学事业上的一项空白，为我国将来对南极进行系统的考察、进一步加强国际科学技术交流与合作、和平利用南极造福于全人类奠定了基础。

Welcome to the Antarctic

The Antarctic is an unexplored treasure land of the globe. It lies at the lowest level of the glacier highland of the earth. The extant data show that Antarctica and its neighbour islands cover an area of 12,460,000 square kilometres. The surrounding ice shelf covers an area of 1,580,000 square kilometres. The total area amounts to 14,040,000 square kilometres, which accounts for 9.4 per cent of the land of the earth. The plane shape of the continent looks like a tadpole. The continent proper takes the Antarctic pole as its center and 70° south latitude as its circumference, its diameter being 4,500 kilometres. It is 1,000 kilometres from South America and 3,500 kilometres from Australia. The South Pole and Africa are about 4,000 kilometres apart. The voyage from Shanghai to the South Pole is at a distance of more than 20,000 kilometres. Its peculiar natural conditions are of paramount importance to the understanding of the whole circumstance of the earth. It has also a significant and direct effect upon other continents in respect to meteorology, oceanology, geophysics and radio communication.

The globe is an organic whole. 95 per cent of the land of Antarctica is covered with ice and snow. It is the highest land mass in the earth, with an average elevation of 2,350 metres. Its highest peak—Mt. Vinson Massif has an elevation of 5,140 metres. The South Pole is also the coldest region in the earth known as the "cold—pole zone", with an average temperature of 25℃ below zero, which is even 12℃ lower than that of the North Pole. Its minimum temperature falls to more than 80℃ below zero. The ice sheet is formed at an average thickness of some 2,000 metres, of which the thickest reaches 4,800 metres. The total volume of ice sheet amounts to 24,500,000 cubic square kilometres, covering nearly 90 per cent of the fresh water of the earth. This is the largest of the world's natural icehouses. It is estimated that the surface of the world's oceans would rise to a height of 60 metres, if the ice sheet of the South Pole thaws entirely all at once. The South Pole is also the driest land in the earth where windstorms are frequent and wind velocity is the strongest. The annual precipitation around the coastal regions amounts to 200—300 millimetres, analogous to that of Inner Mongolia and Ninxia of China. The annual precipitation in the inland area is only 30—50 millimetres, approximate to that of Sahara Desert in Africa. This is why people usually call this vast tract of iceland "White Desert". Storms rage for one third of winter days in the South Pole, at a wind velocity of 40—50 metres per second. The maximum wind velocity may sometimes get to 100 metres per second, greatly surpassing the strength of hurricane. The weather changes in the South Pole have a direct effect on the global climate. In order to acquire accuracy of the longrange weather forecasting, it is necessary to have a full knowledge of the global atmospheric cycles. Never can we accomplish this without amassing data concerning climate changes around the South Pole. Besides, it is also necessary to obtain data about the atmospheric ionosphere in order to develop astronavigation. But it is impossible to obtain data of this kind at high latitudes from China itself because of geographical limitations. Only in Antarctica is it possible to get this information from geographical observations. The Southern Ocean around Antarctica has been called the Fifth Great Ocean in the earth, which is linked with the waters of the Pacific Ocean, the Indian Ocean and the Atlantic Ocean. Moreover, the Southern Ocean is also the only unpolluted ocean in the earth at present, which has a great effect on the Indian Ocean and the Pacific Ocean.

The South Pole is not only a "natural laboratory" richly endowed by nature, but also rich in mineral and biological resources. It is a huge "Treasure-house of natural resources". Down below the ice-and-snow covered ground and the continental shelf lie hidden rich crude oil, natural gas and over 200 kinds of minerals, such as coal, iron, copper, gold, silver, uranium, manganese, etc.. The biological resources in the Southern Ocean are also abundant. Apart from a great variety of fishes such as cuttlefish, etc., and animals including whales and seals, shrimp-like krill, proven to have high protein, are abundant in the Antarctic Ocean. It is estimated that these crustaceans may have a deposit of fifty hundred million tons, which will make up the world's largest stock of animal protein in the future.

In the 2nd century much had been talked about this "incognizant large Southern land mass". In the late 18th century, explorers began to make numerous venturous expeditions to the Antarctic. However, the mysteries of the Antarctic have been gradually unveiled since the beginning of the fifties of the 20th century. At present more than forty permanent stations and about 100 summer stations have been established by 16 countries.

Editor's Note

China began to take up the work of exploration and research in the Antarctica in the 80's. It was much later than other countries. Since January 1980, at the invitation of Australia, New Zealand, Argentina and Japan, 32 Chinese scientists (40 person-times) have been successively sent to Antarctica, thus preparing the way for further conducting research there. China also sent representatives to the 16th, 17th and 18th sessions of the Antarctic Scientific Research Committee, the Antarctic Biological Resources Conference and the Fourth International Antarctic Earth Science Symposium. On May 9, 1983, the 27th Session of the Standing Committee of the National People's Congress adopted a decision to join the Antarctic Treaty. On September the same year, the Chinese delegation attended the Conference of the Antarctic Treaty for the first time. Since then China has become one of the Antarctic Treaty's member states. International Antarctic Institution consists of two big organizations: one is the Antarctic Scientific Research Committee under the auspices of the International Academic Circles; the other is an organization at governmental level—The Antarctic Treaty Consultative States. However, China never established its own Antarctic research base. Among the five UN member states, China was not one of the Antarctic Treaty Consultative States; China has no say on cardinal issues. Therefore, the establishment of China's first investigation station there will be of immense significance to the country.

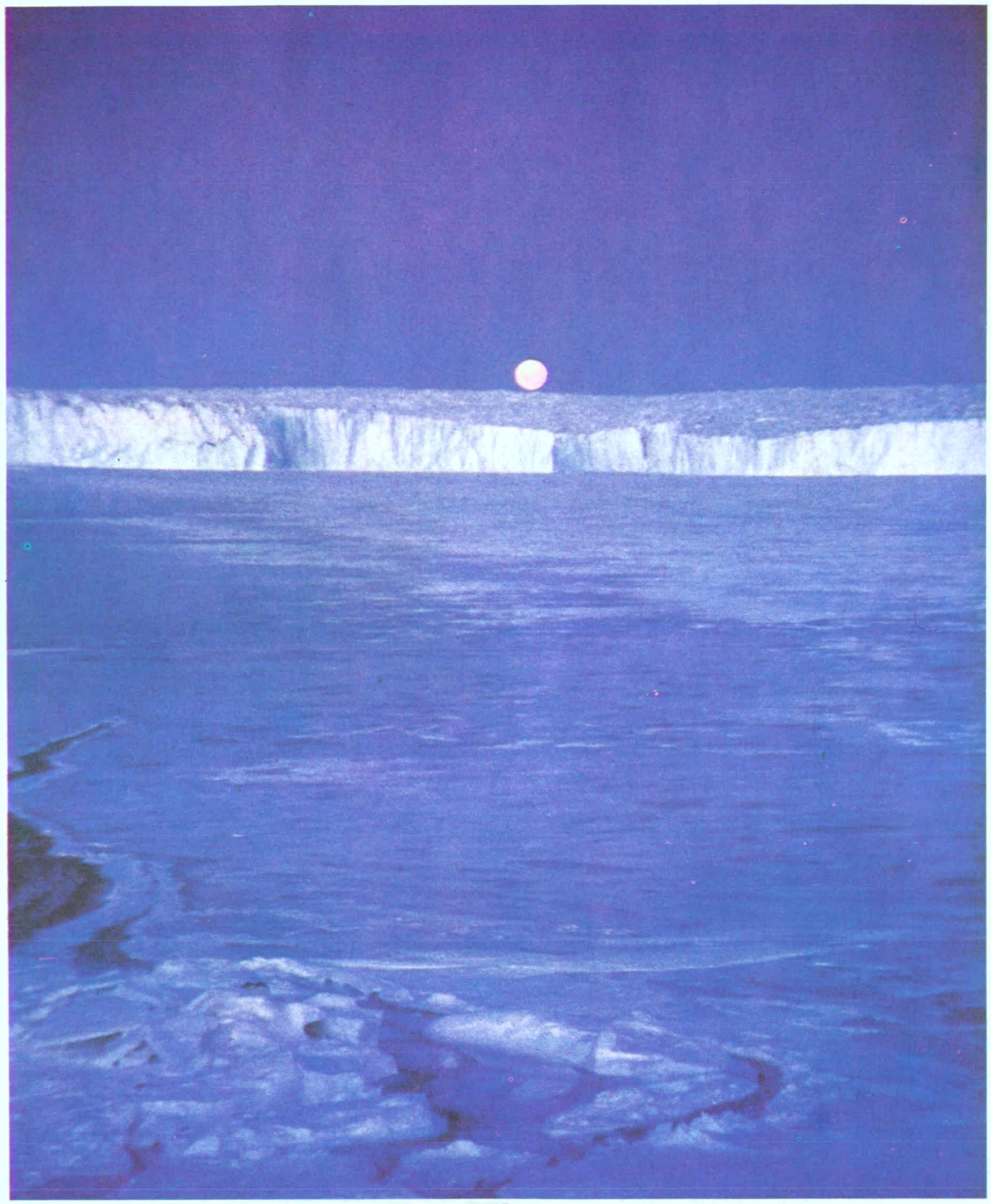
China's first expedition to Antarctica and the Southern Ocean left Shanghai aboard the ship "Xiangyanghong 10" on Nov. 20, 1984. On arrival at the destination, the expedition members worked dauntlessly under arduous conditions and eventually succeeded in setting up China's first research station-China's Great Wall Station on King George Island—on february 20, 1985, with our national flag raising high above the Southern Ocean. This opened a new chapter in the history of China's scientific research in the Antarctic and also helped fill in the gaps of the country's science. All in all, the success will provide a sound basis for further research of the Antarctic, strengthening of international scientific exchange and widening of international cooperation in the area and the peaceful uses of the Antarctic in the interests of humanity.

Comrade Jiang Jialun is a middle-aged Chinese marine biologist. On October 1982, at the invitation of the Australian government he was sent by our Antarctic Investigation Committee to the Antarctic to conduct research in Australian Davis Station. On June 1984 he returned with great success. During his stay in the Antarctic he worked very hard and selflessly in the spirit of great patriotism, defying difficulties and dangers and displaying dauntless courage to explore the secrets of the universe. Once he fell into the icy waters by accident, but he faced danger fearlessly. After he was rescued, he continued to work stubbornly and steadfastly and completed his one year's investigation in due time. He succeeded in collecting a wealth of data about biology. His significant theses and valuable scientific results have been widely acclaimed by the Australian Antarctic Research Bureau and Scientists. He has indeed won honour for his motherland. The National Marine Bureau cited him for meritorious service. The Zhejiang Science Committee and the Zhejiang Science Association conferred the title of "Exemplary Scientific Worker" on him.

During the period of his strenuous work in the Antarctic, Comrade Jiang Jialun had taken a great number of photographs of the Antarctic scenes, biological resources and the scientists' work and life in the Antarctic, thus providing the Chinese people with the most valuable information about the Antarctic. At the time when China has sent its first expedition to the Antarctic and China's first research station is going to be set up there, the Zhejiang People's Fine Arts Publishing House has the pleasure to publish this large album of photographs selected from Comrade Jiang's numerous pictures brought back from the Antarctic. This may be of great value both from artistic point of view and documentary consideration. It is hoped that this album will help reader know more about the Antarctic and do his bit to promote the colossal cause of our motherland in response to the call of undertaking a comprehensive study of the Antarctic and to contribute to the peaceful uses of Antarctica and the common interests of humanity.

南极冰山，它浮动在大海上，银光闪烁的倒影，流溢着太阳浮光的浪花，向你横戈飘来。

The Antarctic glacier floating with its glistening silvery reflection on the sea, and the spray of the billows shimmering with flooding sunlight, are rolling on boisterously.



南大洋上浮冰区——航海的危险地带。

Floating-ice-zone in the Southern Ocean—a dangerous zone for navigation.

一望无际的南极大陆冰盖，高达数百米。

A view of boundless ice sheet to a thickness of several hundred metres in Antarctica.

陌生的、诱人的，充满梦幻、恐怖的大陆冰山区。

Strange, weird, dreamlike and awe-inspiring iceberg on the Continent.

又是一个好天气，南极滨海风光无限好。

Another fine day! A wonderful sight along the coast of Antarctica.