

CHINA

Fish with rice



Lu Xiangrong and his wife Hao Yujiao manage floating rice patches on a fishpond in Rongjiang county, Guizhou province, on Wednesday. Local fish farmers learned to grow rice on water with the help of agricultural experts, achieving a win-win outcome of less pollution and greater output. WANG BINGZHEN / FOR CHINA DAILY

Fengyun 3E weather satellite captures first images of sun

Pictures will help forecasters predict interruption of communication on Earth

By LI HONGYANG
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The Fengyun 3E weather satellite has captured its first test pictures of the sun, offering improved assistance in predicting solar activities and their impact on Earth and space weather.

"With the images, we will better forecast and instantly warn people and authorities of impacts on Earth from solar activities, including interruption of communications, navigation and large-scale power outages," Zhang Peng, deputy director of the National Satellite Meteorological Center, told a news conference on Thursday at which the pictures were released.

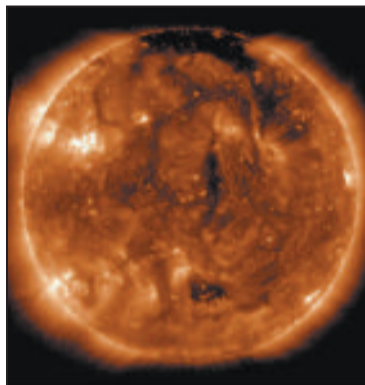
Solar activities including solar flares — explosive events that release energy from the sun's sur-

face — disrupt the functions of infrastructure by altering the Earth's magnetic field and ionosphere.

As the sun is the major energy source for Earth, its activities also affect weather and climate systems, Zhang said, adding that people need to always pay attention to solar activities.

The images can also provide more accurate data for space weather forecasts to ensure the safety of manned spacecraft operations and of astronauts who conduct spacewalks, Zhang said.

Zhang said that facilities on Earth can only see light from the sun through unfavorable atmospheric and weather conditions, while the satellite can detect other light that directly affects Earth's environment.



An extreme ultraviolet image of the sun taken by China's Fengyun 3E weather satellite. PROVIDED TO CHINA DAILY

"Like a CT scan for a body check, the satellite's imager can 'check' the sun all the time," he said.

The imager, the first of its kind, can capture images of hot gases in the Sun's outer atmosphere with X-rays, while extreme ultraviolet

images show the Sun's dark bars at a lower temperature. Combining the two images can predict solar eruptions more effectively, the China Meteorological Administration said.

By the end of this year, the administration will release an album of photos taken by the satellite.

Data from the Fengyun series of satellites has served 118 countries, the administration said. China launched Fengyun 3E, the world's first early morning weather satellite for civil use, from the Jiuquan Satellite Launch Center on July 5.

It belongs to the polar-orbiting satellite group, which pass over the north and south poles in a north-south ellipse synchronous with the sun, passing places on Earth at the same local time.

One of the satellite's sides faces the sun all the time, making it suitable for monitoring solar activities, Zhang said.

Mainland universities get their highest rankings

By WANG MINGJIE in London
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Beijing's Tsinghua and Peking universities have tied for 16th place in the latest edition of the Times Higher Education World University Rankings, the highest position ever achieved by Chinese mainland universities.

Tsinghua climbed four places from last year's ranking and Peking seven places, to give the Chinese mainland two institutions in the top 20 universities in the world for the first time. Oxford University in the United Kingdom retained top spot for the sixth consecutive year in the rankings, which were released on Thursday.

A record 10 universities from the Chinese mainland were in the top 200, with nine of them improving on their previous ranking.

The rankings covered 1,662 institutions this year, 136 more than last year. Eight Chinese mainland universities made their debut in the rankings, taking the Chinese mainland's total representation to a record 97 universities.

The Chinese mainland was the fourth-most-represented country

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Phil Baty, chief knowledge officer at Times Higher Education

or region in the rankings, behind the United States with 183, Japan with 118 and the UK with 101.

The COVID-19 pandemic influenced the rankings, with universities involved in research on understanding and managing the pandemic seeing significant boosts in their rankings.

Eleven Chinese mainland universities benefited from such research, including Huazhong University of Science and Technology in Wuhan, Hubei province (181), Southern Medical University in Guangzhou, Guangdong province (401-500), Capital Medical University in Beijing (501-600), and Wenzhou Medical University in Wenzhou, Zhejiang province (601-800), which all moved up at least two ranking bands.

Phil Baty, chief knowledge officer

at Times Higher Education, said: “The world's elite universities have enjoyed a long period of dominance at the top of the table with help from historic reputation, global status and reliable income. But our data shows us there are clear shifts happening across higher education around the world, and perhaps most rapidly in the Chinese mainland.”

Continued improvement

“Last year, we witnessed the Chinese mainland achieve a top 20 position for the first time. This year, we see it double its representation in the group as Tsinghua University and Peking University both tie in the highest position ever for the country.”

He added that Chinese mainland institutions have continued to

improve in the university rankings despite the pandemic. “It will be interesting to witness what happens in the post-pandemic world, and whether the Chinese mainland can challenge the US and UK's long-running dominance in the global top 10,” Baty said.

The top 10 positions were held by the same universities, with the US having eight and the UK two.

The California Institute of Technology and Harvard University in the US both moved up to equal second, while the UK's Cambridge University tied for fifth after dropping to sixth last year. Princeton University in the US also improved, moving up two places to seventh.

This year, Japan, South Korea, Russia, Singapore, New Zealand and Hong Kong all claimed their best finishes in the top 200 since the current methodology was introduced in 2016. The University of Tokyo (tied for 35th), University of Hong Kong (tied for 30th), Seoul National University (tied for 54th), the National University of Singapore (21st), the University of Auckland (tied for 137th) and Lomonosov Moscow State University (tied for 158th) all moved up the table.

HK schools launch new civic education courses

By KATHY ZHANG
and CHLOE XU in Hong Kong

A number of Hong Kong secondary schools started their first classes of the revamped liberal studies course, now known as citizenship and social development, as the new school year kicked off on Thursday.

Authorities from the schools said they hope the revamped subject will help instill positive values in students and foster a stronger sense of national identity.

Educators, parents and political figures had long called for an overhaul of liberal studies, citing politicization of the subject to the point that young people were misled to become politically radicalized, as attested by the large number of teenagers arrested for their involvement in the 2019 social unrest.

Thursday marked the official roll out of the overhauled subject. The revised curriculum covers three modules: Hong Kong under “one country, two systems”; the country since reform and opening-up; and interconnectedness and interdependence of the contemporary world.

Heung To Secondary School (Tseung Kwan O) is one of the schools that began teaching the class from Thursday. Its principal, Tang Fei, said the new curriculum is more comprehensive and could help students get a clearer overall understanding of the city, as well as the nation.

He also considered it meaning-

ful for students to take part in extracurricular activities the school will provide, such as the national flag-raising ceremony.

Ho Hon-kuen, chairman of Education Convergence, expressed support for the overhauled subject. He said students would also benefit and learn from school activities such as flag-raising ceremonies, especially on National Day and the anniversary of the city's return to the motherland.

National security and the National Security Law for Hong Kong is a new section under the revamped curriculum, which is what G.T. (Ellen Yeung) College in Tseung Kwan O taught students in their first citizenship and social development class.

Raymond Tam Kwok-wai, principal of the college, said national security education was a good starting point for the subject, as it is a much-discussed topic in the city, making it easier to stimulate students' interest in the subject.

Tam said it is important for students to know the concept of national security and the necessity of safeguarding it, and learn to appreciate the stability and prosperity the city enjoys.

Kwok Wing-yin, a fourth year secondary student at the college, said after class that she wanted to know more about the National Security Law for Hong Kong and the legal cases arising from its implementation.

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Winnie Au Wing-yi (back right) and Lau King-fai teach citizenship and social development at a secondary school in Hong Kong on Thursday. RAYMOND CHAN/CHINA DAILY

COVID-19 controls spur recovery of marine sectors

By XIE CHUANJIAO
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China's marine economy is accelerating the pace of its recovery and is expected to embrace high-quality development thanks to effective measures to prevent and control the COVID-19 pandemic, a blue book said recently.

The economic importance of China's marine sectors will continue to grow this year and through to the end of the 14th Five-Year Plan (2021-25) period, with domestic consumption booming and the international market increasingly dependent on Chinese products, said the *Blue Book of China's Marine Economy (2021)*, which was released in Qingdao, Shandong province, on Sunday.

The sectors' economic output value decreased slightly last year but showed signs of recovery. The book said China's marine GDP reached more than 8 trillion yuan (\$1.24 trillion) last year, dropping 5.3 percent year-on-year.

However, market players in the marine sectors accelerated industrial reconstruction and quickly narrowed declines in revenues and profits with the help of favorable government policies.

The blue book was compiled by Ocean University of China, which is based in Qingdao, and the National Marine Data and Information Service, a government-funded public institution based in Tianjin that is responsible for the management of national marine data and information resources.

Wang Dianchang, former director of the policy, laws and regulation

department of the State Oceanic Administration before it was merged into the newly created Ministry of Natural Resources in a government reshuffle in 2018, said China should establish a new pattern for high-quality development of the marine economy, and major coastal cities should play a big part.

Bay areas, like the Guangdong-Hong Kong-Macao Greater Bay Area, should undertake more tasks to improve their industrial structures and reduce repetitive construction and blind competition, Wang said at the blue book's launch ceremony.

He also mentioned the marine aquaculture sector, saying that the development of marine ranches represents a high-end trend for the sector.

The blue book said the marine economy will ride waves of scientific and technological innovation and make breakthroughs in more key technologies.

Marine engineering equipment manufacturing is expected to see greater application of Chinese-developed technology. For example, 5G technology will help new types of marine equipment, such as unmanned ships and remotely operated vehicles, enter the fast lane of development, the blue book said.

“The blue book features a comprehensive demonstration of China's efforts and achievements in promoting high-quality development of the marine economy, as well as its contribution to addressing global climate change,” said Zhao Xin, director of the blue book's editorial board and dean of School of Economics at Ocean University of China.