

## 2 BeiDou satellites launched on single carrier rocket



China launches two BeiDou-3 satellites into space via a single carrier rocket to support its global navigation and positioning network at 7:45 p.m. Sunday. [Photo/Xinhua]

China launched two BeiDou-3 satellites into space via a single carrier rocket to support its global navigation and positioning network at 7:45 p.m. Sunday.

The satellites were aboard a Long March-3B carrier rocket which took off from Xichang Satellite Launch Center in the southwestern province of Sichuan.

This is the first two BeiDou-3 satellites launched by China, as its self-developed BeiDou Navigation Satellite System officially began to expand into a global network.

Named after the Chinese term for the plough or the Big Dipper constellation, the BeiDou project was formally initiated in 1994. It began to serve China in 2000 and the Asia-Pacific region at the end of 2012.

China plans to build BeiDou into a global positioning and navigation system by around 2020, making it the third country in the world after the United States and Russia to operate its own navigation system.

Compared to earlier generation satellites, the BeiDou-3 is able to send signals that are better compatible with other satellite navigation systems and provide satellite-based augmentation, as well as search and rescue services in accordance with international standards.

“New technology has significantly improved the performance of the BeiDou-3, with the signal accuracy in space higher than half a meter while its positioning accuracy has reached 2.5 to five meters, said Yang Changfeng, chief designer of the BeiDou system.

China plans to launch 18 BeiDou-3 satellites around the end of 2018 to expand the BeiDou services to the countries along the Belt and Road routes.

By around 2020, when the system goes global, it will have more than 30 satellites.

“Launches featuring two or more satellites on a single carrier rocket will be conducted regularly,” said Ye Chengmin, deputy chief designer of the Long March-3A carrier rocket.

All the BeiDou satellites currently in space were sent up from Xichang Satellite Launch Center, said Lin Yunan, head of the human resources department of the center.

The BeiDou-3 satellites and the carrier rocket were developed by China Academy of Space Technology and China Academy of Launch Vehicle Technology, respectively.

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## [Archaeologists discover cave-dwelling agrarian society](#)

Chinese archaeologists have found a large amount of carbonized rice grains in caves dating from the New Stone Age, challenging the conventional view that cave dwellers were solely hunter gathers and did not cultivate land for food.

More than 10,000 grains were discovered at the No. 4 cave in the Nanshan ruins in east China’s Fujian Province, which dates back 5,300 to 4,300 years.

At an ongoing international conference on prehistoric archaeology being held in Fujian, the archaeological team announced that this is the first cave-dwelling agrarian society ever found in China.

The finding is also rare worldwide, said Zhao Zhijun, a member of the team and also from the Institute of Archaeology of the Chinese Academy of Social Sciences.

The grains are believed to have been grown by the Nanshan cave dwellers, rather than being obtained by other means, because many farmland weeds were also found along with the grains, according to Zhao.

The team’s studies on the remains of the cave-dwellers showed that they suffered dental cavities and other oral diseases that are common among humans in agrarian societies, said Wang Minghui, another team member and researcher with the institute.

“It further proves that Nanshan residents mastered some agricultural techniques,” Wang said.

The finding has raised the question why the Nanshan ancestors continued to live in caves after beginning farming. It is traditionally believed that humans in agrarian societies would move from caves to more spacious homes due to explosive population growth.

“The Nanshan finding offers a new perspective for prehistoric study. We must consider more possibilities when talking about where our ancestors lived and what they lived on,” Zhao said.

Excavation of the Nanshan ruins started in 2012. Scores of caves, thousands of items made from pottery, stone and bones, as well as eight tombs and two reservoirs, have been found at the site.

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## [China's top legislature closes bi-monthly session](#)

The Standing Committee of the National People's Congress (NPC) closed its bi-monthly session Saturday, adopting a new law on public libraries, revisions to several laws, and decisions on reforms.

Zhang Dejiang, chairman of the NPC Standing Committee, presided over the closing meeting, as well as a meeting attended by the chairman and vice chairpersons beforehand.

Zhang urged members of the NPC Standing Committee to study and implement the spirit of the 19th Communist Party of China (CPC) National Congress and push forward relevant legislation work.

“The NPC Standing Committee will firmly support the centralized and unified leadership of the CPC Central Committee with Xi Jinping at the core and completely implement Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era,” he said.

### **New Library Law to promote reading**

The new law aims to promote the development of public libraries and help boost reading among ordinary Chinese.

The law asks the governments to increase input in public libraries, listing it in their budget and development plans.

Libraries are pushed to apply modern technology including digitalizing content and improving online services, better protecting ancient books and promoting traditional culture.

Libraries will be punished if hosting or allowing others to host activities undermining state security and the public interest. Those directly responsible for the offences will face penalties.

### **Law revision for updated, clearer standards**

The top legislature adopted a revision to the standardization law, 28 years after it took effect.

The revised law clarifies what standards are compulsory and what are recommendations, expands the scope of standards from industrial products, construction and environmental protection to much broader sectors, including agriculture, industry, services and social programs.

Technical standards concerning health and life and property safety, as well as national and ecological security are prioritized.

The government is required to better exercise their duty of coordinating different standards to avoid overlapping and duplication and supervising implementation of standards.

Lawmakers also adopted the revision to the law against unfair competition, an amendment to the country's criminal law to punish acts of gravely disrespecting the national anthem, as well as minor amendments to several clauses of 11 laws that facilitate cutting red tape.

### **Decisions on reforms**

The top legislature passed a decision to extend a pilot program of reforming land use rules in selected areas for one year, from Dec 31, 2017 to Dec 31, 2018.

Approved in February 2015, the pilot program involves reforms to the way rural land is expropriated, easing restrictions on rural construction land trading, and reforming the administration of rural residential plots.

It also adopted a decision to expand across the country a pilot project to reform the supervision system, launched in Beijing, and Shanxi and Zhejiang provinces in January.

Other decisions adopted include temporarily adjusting application of laws and regulations during armed police reform, and applying the new National Anthem Law in Hong Kong and Macao special administrative regions.

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## **[Li to attend East Asia summit, visit Philippines](#)**

Chinese Premier Li Keqiang will visit the Philippines and attend a series of high-level meetings including the 12th East Asia Summit from Nov. 12- 16 in the Philippine capital Manila.

Chinese Foreign Ministry spokesperson Hua Chunying made the announcement here on Sunday.

Hua said that during Li's stay in Manila, he will also attend the 20th China-ASEAN (10+1) leaders' meeting, and the 20th ASEAN-China, Japan and Republic of Korea (10+3) leaders' meeting.

Hua said Li's tour is invited by Philippine President Rodrigo Duterte. The Philippines is the chair of ASEAN this year.