

## China's cargo spacecraft completes third in-orbit refueling

China's Tianzhou-1 cargo spacecraft and Tiangong-2 space lab completed their third and last in-orbit refueling at 8:17 p.m. Saturday.

The third refueling, lasting about three days, confirmed the technical results from the second refueling.

Tianzhou-1, China's first cargo spacecraft, was launched on April 20 from south China's Hainan Province, and it completed automated docking with the orbiting Tiangong-2 space lab on April 22.

The two spacecraft completed their first in-orbit refueling on April 27 and second on June 15.

In the past five months, Tianzhou-1 has operated smoothly and completed various tasks.

---

## 'Granny panda' celebrates 'centennial' birthday as she turns 35

A zoo in southwest China on Saturday threw a centennial birthday party for its celebrity "granny panda" who turns 35.

Xinxing, born in 1982, is one of the oldest giant pandas in the world. She is the matriarch of a huge panda family of 90. Her children and grandchildren are spread across the globe in 20 countries and regions including the United States, Canada and Japan.

On Saturday, Xinxing was treated with a feast of bamboo shoots and apples in the Chongqing Zoo. The song "happy birthday to you" was being played as she ate. Her offsprings in the zoos of Hong Kong, Toronto and Memphis followed the human's tech fashion to send their greetings via online video clips.

But the grandma does not live alone. She is accompanied by a son, five grand-daughters and two great grand-children at the zoo.

Xinxing was brought to the zoo at one-year-old. Her first birth was in 1992. In 2002, she broke the record of old-age pregnancy for panda when she gave birth to a twin at 20.

Her care-taker Yin Yanqiang said Xinxing remains fit at 35 and has not developed any serious aging problems.

She weights 94 kilograms and eats 15 kg bamboo shoots and 1 kg bamboo leaves on average and plenty of fruits as well as refined feeds three times a day, Yin said.

The zoo has specially arranged for her purified water to drink and monthly physical check-ups. All aims to help Xinxing have a wonderful senior life, Yin added.

Giant pandas are known to have very low birth rates. In the wild, pandas normally live 15 to 20 years. The ones in captivity can live up to around 30 years, equivalent to 90 human years.

According to China's State Forestry Administration, as of the end of 2013, there were fewer than 2,000 pandas living in the wild, mainly in the mountains of the provinces of Sichuan, Shaanxi and Gansu. Another 400 or so lived in captivity.

Earlier this week, the world's oldest captive panda Basi died in China at the age of 37. Basi was the model for the mascot of the 1990 Beijing Asian Games, Pan Pan, which has become a household name.

---

## [China's BeiDou-3 satellites get new chips](#)

A new chip for the BeiDou Navigation Satellite System (BDS) was unveiled on Saturday by the Global Navigation Satellite System and Location Based Service (GNSS & LBS) Association of China (GLAC).

The chip supports the new generation of BeiDou-3 satellites for high-precision navigation and positioning. The positioning accuracy of the chip reaches the sub-meter level without ground-based augmentation.

The chip, developed by Shenzhen-based Allystar Technology, also has uses in unmanned driving systems, wearable devices, precision agriculture and smart logistics.

The value of the satellite navigation and LBS industry stood at 212 billion yuan (31 billion U.S. dollars) in 2016, up 22.1 percent from 2015, according to the GLAC. Core output totaled 80.8 billion yuan, 70 percent of which came from BDS.

Four BeiDou-3 satellites will be launched by the end of this year, and a complete global satellite navigation system in place around 2020, according Yang Changfeng, the system's chief designer.

The scale of the BDS industry will reach 240 billion yuan around 2020, said

Yang.

---

## 9 charged over dumping toxic waste into Yangtze River

Nine people have been charged for dumping 35,000 tonnes of garbage, about 20,000 tonnes of which contaminated a section of the Yangtze River near Shanghai.

The charges were brought Friday by the people's procuratorate of Changshu City, Jiangsu Province against a local waste treatment company. The accused allegedly sold the daily garbage of Haiyan County to unqualified individuals for treatment between August and December 2016.

About 20,000 tonnes was dumped into sections of the river, while the remainder was buried untreated in other provinces, the prosecutors said.

The illegal operation was only halted last December when maritime officers in Taicang City spotted two boats dumping waste. The garbage was dumped into the upstream of two drinking water sources, prompting authorities to suspend taking water from the river for two days.

Taicang lies near the mouth of the Yangtze River, very close to Shanghai.

The Taicang government and a district government of Shanghai spent 5.9 million yuan (900,000 U.S. dollars) treating the pollution caused by the dumping.

Prosecutors said the garbage contained toxic substances. Hydroxybenzene was found to be 32,200 times over safe levels.

The ecological damage is estimated to reach 20 million yuan.

---

## 9 rescued from collapsed tunnel in SW China

Nine construction workers were rescued Saturday after having been trapped for two days in a collapsed railway tunnel in southwest China's Yunnan Province, rescuers said.

Rescuers managed to dig a passageway to reach the workers at about 10:45 a.m. Saturday. The first worker was rescued at about 12:43 p.m. and eight minutes later, all had been rescued, rescue officials said.

All the workers are in stable condition.

The tunnel in the Xishuangbanna Dai Autonomous Prefecture they were working on collapsed at about 10:20 a.m. Thursday.

After digging a small opening through the rubble, rescuers managed to contact the workers with the help of a thin pipe and confirmed that all the workers were alive Friday. They even installed a mobile phone signal amplifier to help them keep in contact.

Later the workers were offered food three times.

More than 230 workers were involved in the rescue operation by excavating small tunnels or larger passageways in four directions.

The tunnel is part of a railway that connects Yuxi and Mohan in Yunnan.