

earth observatory


[home](#) • [data & images](#) • [features](#) • [news](#) • [reference](#) • [missions](#) • [experiments](#) • [search](#)

NATURAL HAZARDS

[Natural Hazards](#) >> [Unique Imagery](#) >> Earthquake Near Chengdu, China


June 10, 2008



June 8, 2008

[Click here to view high-resolution version](#) (4.5MB)

Image Acquired: June 10, 2008

Earthquake Near Chengdu, China

Large images

[June 10, 2008](#) (4.5 MB JPEG)

[June 8, 2008](#) (3.9 MB JPEG)

In the wake of the May 12, 2008, earthquake in China, a series of landslides blocked the Jiangjiang River, creating swollen reservoirs that threatened to break through and flood catastrophically. The largest of

Where in the World



these lakes, Tangjiashan Lake, threatened roughly 1.3 million people. Chinese authorities faced a dilemma. If they allowed the water to keep rising, it would eventually overtop the dam and flood downstream communities. But cutting a drainage channel through the dam was also risky. The channel could destabilize the dam, and the lake could empty uncontrollably in a wall of water.

On June 10, 2008, Chinese authorities announced that the landslide that created Tangjiashan Lake had been successfully breached, and the lake had safely drained. These natural-color images, acquired by Taiwan ' s Formosat-2 satellite, show changes in the Jiangjiang River—downstream from the lake—before and after the intervention.

The bottom image, from June 8, 2008, shows the apparently slow-moving river, hampered by landslides both up- and downstream (river direction is from left to right). A landslide appears in this scene, and a small sluice (thin, off-white line) appears to have been cut across it to allow water to pass. Some water flows through the river channel downstream.

The top image, from June 10, 2008, shows a swollen, faster-flowing river after the massive landslide upstream was breached. Compared to the image taken two days earlier, the river is wider, and it has submerged some land features along its banks. Its tan hue indicates that it carries considerable sediment, including sediment from the breached landslide upstream. The flooded river has overtopped the smaller landslide shown in this scene.

Draining Tangjiashan Lake was expected to cause a flood wave downstream, and there was a risk that this flood wave could cause substantial damage, including additional landslides. On June 10, 2008, China ' s Xinhua news agency reported that the flood wave safely passed through the city of Mianyang, which lies far downstream from the drained lake (see [river map](#)) and downstream from the area pictured here.

Draining the lake sent floodwaters coursing into the city of Beichuan, which had been home to some 22,000 people before the earthquake struck. Having already experienced massive damages from the quake, the city was evacuated before authorities drained the lake on June 10. As of June 10, 2008, more than 69,000 people had died in the Sichuan earthquake, and more than 17,000 remained missing.

Image Posted

June 10, 2008

Satellite & Sensor

FORMOSAT-2- RSI

Other Images for this Event

Posted: [Jun 09, 2008](#)
 Posted: [Jun 06, 2008](#)
 Posted: [Jun 02, 2008](#)
 Posted: [May 29, 2008](#)
 Posted: [May 20, 2008](#)
 Posted: [May 20, 2008](#)
 Posted: [May 20, 2008](#)
 Posted: [May 20, 2008](#)
 Posted: [May 20, 2008](#)
 Posted: [May 13, 2008](#)

Unique Imagery Latest Events

[Glory Over Pacific Ocean Clouds](#)
[Spring in Kazakhstan](#)
[Ship Tracks off British Columbia](#)
[Phytoplankton surround the Falkland Islands](#)
[Phytoplankton off the Coast of Argentina](#)

References

Petley, D. (2008). [Dave 's Landslide Blog](#). Accessed May 28, 2008.

Wong, E. (2008, June 10). [China drains lake into ruined town](#). *The New York Times*. Accessed June 10, 2008.

[Formosat](#) image © 2008 [Dr. Cheng-Chien Liu](#), National Cheng-Kung University, and Dr. An-Ming Wu, [National Space Organization](#), Taiwan. Caption by Michon Scott.

[Recommend this Image to a Friend](#)

Unique Imagery: [Topic Home](#) | [Archive](#)

[Natural Hazards Home](#) | [Section FAQ](#)

[Subscribe to Natural Hazards](#)
[About the Earth Observatory & Natural Hazards](#)

[Contact Us](#)

[Privacy Policy and Important Notices](#)

Responsible NASA Official: Lorraine A. Remer

Webmaster: Goran Halusa

We're a part of the [Science Mission Directorate](#)