

## Institute for Science and International Security

ISIS IMAGERY BRIEF

September 30. 2010

## What is North Korea building in the area of the destroyed cooling tower? It bears watching.

By David Albright and Paul Brannan

ISIS has obtained new commercial satellite imagery from DigitalGlobe of the Yongbyon nuclear site in North Korea. Taken on September 29, 2010, the imagery shows new construction or excavation activity in the area surrounding the destroyed cooling tower for the 5MW reactor (see figure 1). However, there is no indication in the imagery that North Korea is rebuilding its cooling tower. In addition, the new excavation activity appears to be more extensive than would be expected for rebuilding the cooling tower. But the actual purpose of this excavation activity cannot be determined from the image and bears watching.

In the new image, there are heavy machinery tracks as well as trucks and heavy construction or excavation equipment at the site. There also appears to be ongoing construction of two small buildings adjacent to the destroyed cooling tower. The buildings do not appear to be for construction support. It is unclear if the activity seen in this image represents preparation for construction of a new cooling tower or preparation for construction of other buildings or structures for some other purpose.

The Yongbyon 5MW reactor's cooling tower was destroyed during a controlled demolition in June of 2008 as part of the disablement phase negotiated during the now-stalled Six Party Talks. Until recently, there was no indication of new construction or excavation activity in the area of the destroyed cooling tower. It was a field with a circular foundation where the cooling tower once stood (see figures 2, 3 and 4). Figure 5 shows the reactor's cooling tower before demolition.

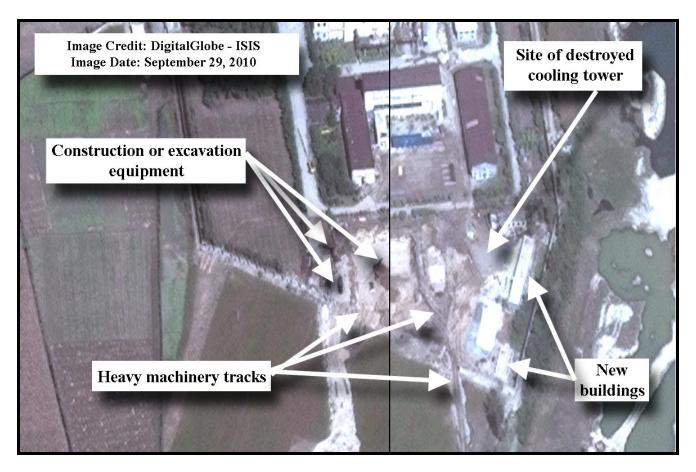


Figure 1. Commercial satellite image from DigitalGlobe from September 29, 2010, showing new activity at the site of the destroyed cooling tower at North Korea's Yongbyon nuclear site. Heavy machinery tracks, construction or excavation equipment and new buildings can be seen at the site.

ISIS REPORT 2 | P a g e



Figure 2. September 21, 2008 DigitalGlobe satellite image of the same site. Only the remaining foundation of the destroyed cooling tower can be seen.

ISIS REPORT 3 | P a g e

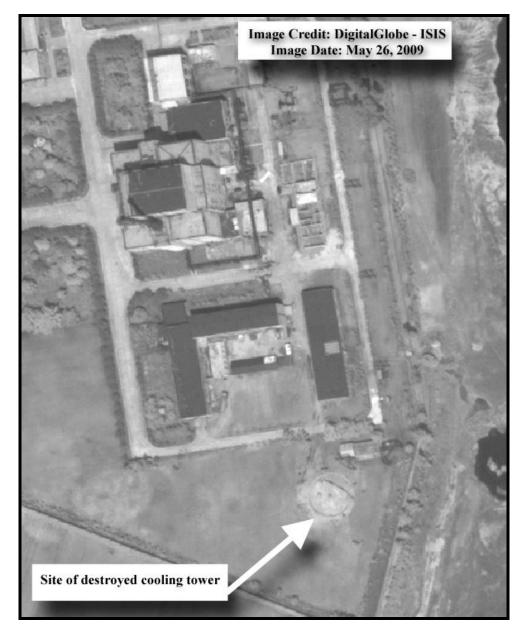


Figure 3. May 26, 2009 DigitalGlobe satellite image of the same site. Only the remaining foundation of the destroyed cooling tower can be seen.

ISIS REPORT 4 | P a g e

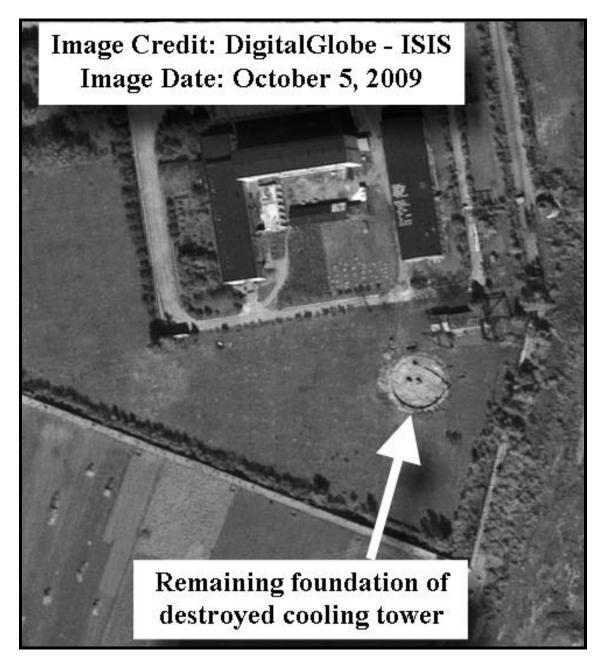


Figure 4. October 5, 2009 DigitalGlobe satellite image of the same site. Only the remaining foundation of the destroyed cooling tower can be seen.

ISIS REPORT 5 | P a g e

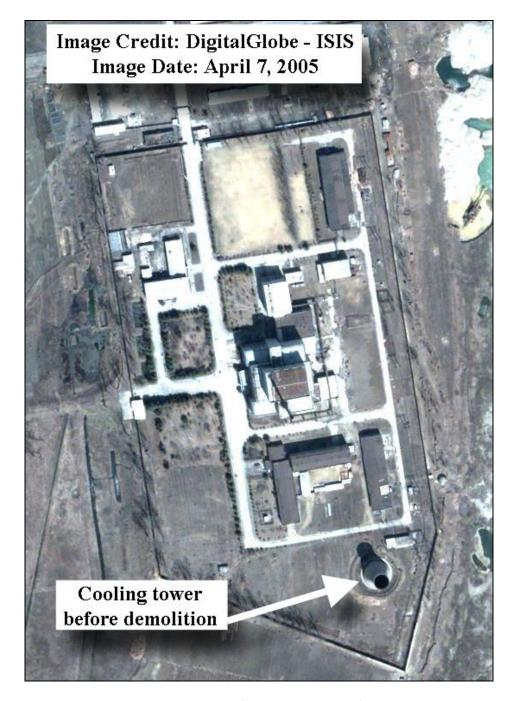


Figure 5. April 7, 2005 DigitalGlobe satellite image of the reactor site before the cooling tower was demolished

ISIS REPORT 6 | P a g e