



Satellite Imagery of the Musudan-ri Missile Site in North Korea: Version 2 March 27, 2009

ISIS has obtained commercial satellite imagery from DigitalGlobe of the Musudan-ri missile site in North Korea taken at approximately 11:00 AM (local time) on Friday, March 27, 2009 (see figures 1). According to news reports, North Korea has placed a Taepodong-2 missile on the launch pad. The red circle in figure 1 should be where the top of the missile would be located. The blue circle in figure 1 contains the shadow cast by the part of the gantry in the red circle. We could not determine if the light-colored area inside the red circle is the top of the missile.

Another DigitalGlobe satellite image shows a close-up of the launch pad at the Musudan-ri site taken on March 24, 2009 (see figure 2). The missile may already be installed in this March 24 image. Could the blue arrow be pointing to a shadow cast by a missile in between what appear to be two lateral sunlight spots? Any thoughts and observations are encouraged on this question and whether the top of the missile is visible in figure 1. (email: isis@isis-online.org).

ISIS has also obtained satellite imagery from GeoEye of the Musudan-ri site taken at approximately 11:30 AM local time on March 11, 2009. Figure 3 shows a close-up image of the launch pad, and figure 4 is a wide-area image of the entire missile site.

Figures 5-9 show the launch pad and the position of the crane atop the gantry. The position of the crane can be seen changing direction in the more recent images. In the March 11, 23, and 24 images (figure 5, 6 and 7), the crane is in the same position, perpendicular to the long side of the gantry. In the March 26 image (figure 8), the crane is parallel with the long side of the gantry. In the March 27 image (figure 9), the crane appears diagonal to the long side of the gantry. So, some activity is taking place, suggesting that the missile sections are being loaded into the gantry.

[Banner image credit: DigitalGlobe-ISIS]

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Figure 1. A close-up DigitalGlobe image of the launch pad at the Musudan-ri missile site on March 27, 2009. The red circle should be where the top of the missile would be located. The blue circle contains the shadow cast by the part of the gantry in the red circle. We could not determine if the light-colored area inside the red circle is the top of the missile.

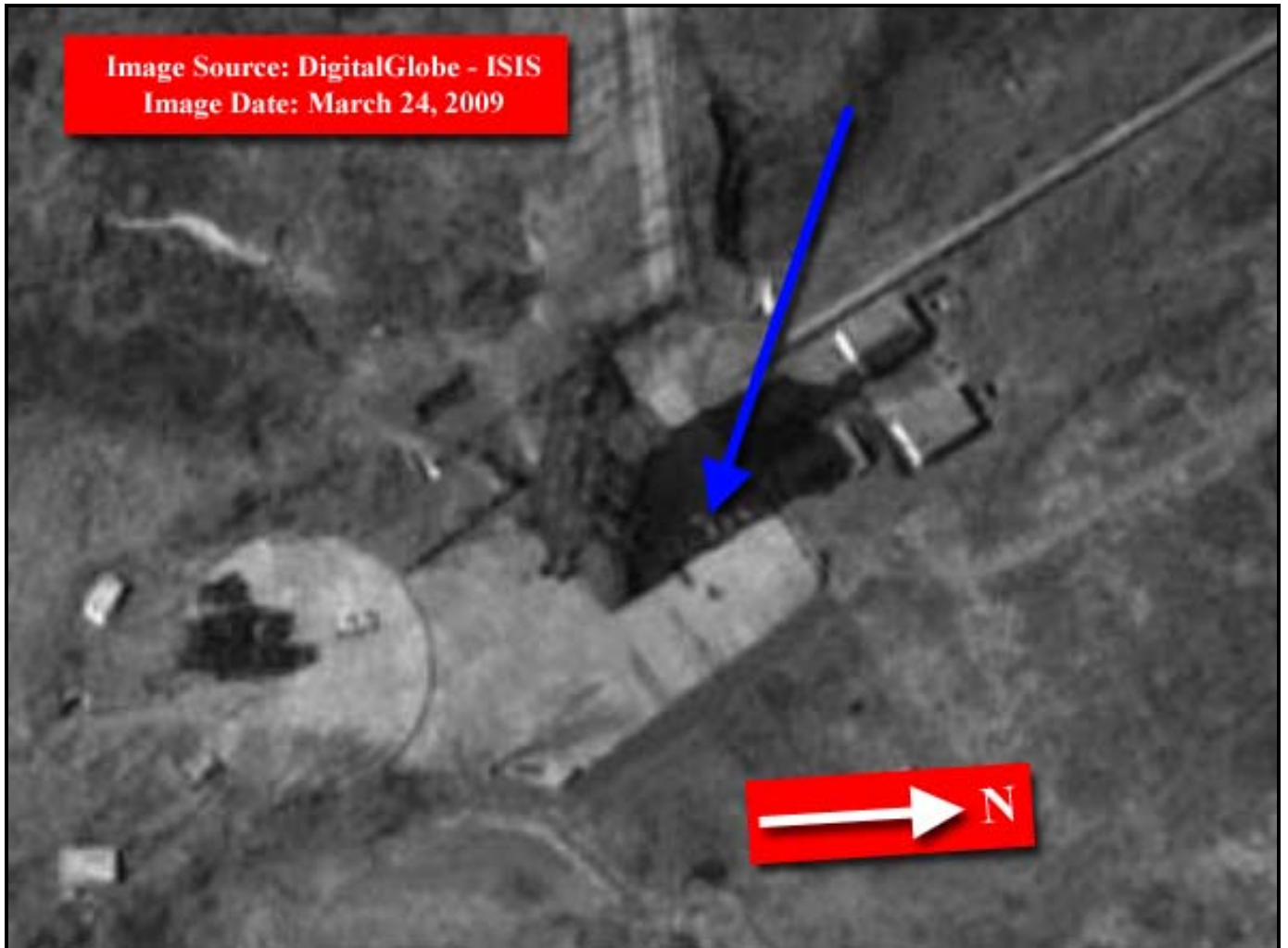


Figure 2. DigitalGlobe satellite image from March 24, 2009 of the launch pad at the Musudan-ri missile site.

Image Source: GeoEye - ISIS
Image Date: March 11, 2009



Figure 3. A GeoEye satellite image of the launch pad at the Musudan-ri missile site in North Korea.



Figure 4. A GeoEye satellite image of the Musudan-ri missile site in North Korea taken on March 11, 2009. The image annotation was done by A. Puccioni of Jane's Intelligence Review and it includes inset close-ups of the missile assembly building, launch pad, engine test stand and the launch control complex.

Image Source: GeoEye - ISIS
Image Date: March 11, 2009



Figure 5. GeoEye satellite image from March 11, 2009 of the launch pad at the Musudan-ri missile site.



Image Source: DigitalGlobe - ISIS
Image Date: March 23, 2009

Crane
Direction

N

Figure 6. DigitalGlobe satellite image from March 23, 2009 of the launch pad at the Musudan-ri missile site.



Figure 7. DigitalGlobe satellite image from March 24, 2009 of the launch pad at the Musudan-ri missile site.



Figure 8. DigitalGlobe satellite image from March 26, 2009 of the launch pad at the Musudan-ri missile site.



Figure 9. DigitalGlobe satellite image from March 27, 2009 of the launch pad at the Musudan-ri missile site.