

Chinese space debris collides with Russian satellite

March 11 2013, by Nancy Atkinson

According to Analytical Graphics, Inc. (AGI), the Center for Space Standards and Innovation (CSSI) has determined that on January 22, 2013 debris from the Chinese FENGYUN 1C collided with Russia's BLITS satellite. The FENGYUAN 1C is the satellite that was destroyed by China on January 11, 2007 in a test of an anti-satellite missile. The collision changed the orbit of the Russian satellite, along with its spin velocity and attitude. The animation above is from AGI and it depicts the event.

The collision wasn't reported until February 4, 2013 when engineers at the Institute for Precision Instrument Engineering (IPIE) in Moscow reported to CSSI a significant change in the orbit for their BLITS satellite. BLITS is tracked to high precision by the International Laser Ranging Service (ILRS), and IPIE had detected a sudden decrease of 120 meters in the semi-major axis of its orbit and a change in its spin [velocity](#) and attitude.

Teams looking at the event had to work backwards to review archival [satellite data](#) and determine what piece of [space debris](#) could be large enough to cause a change in orbit in the BLITS satellite. They found a close approach between debris from FENGYUN 1C and the BLITS satellite. Although the predicted distance would seem to preclude a collision, the fact that the close approach occurred within 10 seconds of the estimated change in [orbit](#) made it appear likely that this piece of FENGYUN 1C debris actually collided with BLITS, AGI reported.

This video, below, shows the distribution of space debris created by the Chinese anti-satellite test in January 2007 over a time frame of more than 1 year.

You can read more at [AGI's website](#).

Source: [Universe Today](#)

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