

Meteor Raises Security Concerns

By [Ivan Nechepurenko](#)

February 18, 2013



The meteorite that sent shock waves through buildings in Chelyabinsk on Friday.

The meteor that struck outside Chelyabinsk on Friday with such suddenness and explosive force has prompted a question among some spooked observers:

If Russian defense officials were unable to track an object 17 meters in diameter rocketing down to earth, how could they detect a much smaller but equally lethal missile?

The answer is: If it were coming from space, they probably couldn't.

Luckily for Russians, space-based nuclear weapons are prohibited — and missiles fired from the Earth's surface are a lot easier to spot.

"Detecting a missile launch and tracking an object in outer space are two completely different tasks," said Eugene Myasnikov, director of the Center for Arms Control, Energy and Environmental Studies.

Both the United States and Russia have early-warning systems that are able to detect

practically all Earth-based missile launches, he said.

Such a system tracks objects that fly relatively close to the Earth's surface, while asteroids travel along a completely different trajectory.

Soon after the meteor struck near Chelyabinsk, some pundits questioned whether what had happened was not a rare natural phenomenon but a military strike.

Yulia Latynina, who writes a column for The Moscow Times, wrote Friday in Novaya Gazeta that she was puzzled as to why the explosion took place so close to the Elansk military testing range, where the 119th missile brigade is based, and why the meteor's trajectory so closely resembled that of a ballistic missile.

On her Ekho Moskvy radio show on Saturday, she admitted to having succumbed to paranoia and apologized for "hastily jumping to conclusions."

Vladimir Zhirinovskiy, the flamboyant leader of the nationalist Liberal Democratic Party, joked Friday that the strike was the U.S. testing a new weapon.

But people's fears over the possibility of a missile strike may be justified in a sense: There is currently no missile defense system in the world that could effectively intercept intercontinental ballistic missiles, Myasnikov said.

The U.S. is currently building a multi-layered missile defense shield that would be able to intercept single missiles but would still be ineffective against a massive nuclear strike, something that Russia, for instance, is technically capable of.

Strategic stability between Russia and the United States is instead based on the concept of mutual assured destruction, meaning that if the U.S. launched a strike into Russian territory, Russia could quickly retaliate.

Russia has based its fierce opposition to a planned U.S. missile defense system in Europe on its desire to maintain this arrangement, saying the missile shield could eventually render Russia's nuclear deterrent ineffective.

Missile strikes from space are more difficult to track or block. But the Outer Space Treaty of 1967 prohibits the deployment of weapons of mass destruction in outer space.

The government is still concerned about creating a warning system for strikes from space — if only to know about future incoming meteors.

Prime Minister Dmitry Medvedev has tasked Deputy Prime Minister Dmitry Rogozin, the Cabinet's point man on both defense and space issues, with developing a system for predicting and preventing extraterrestrial threats.

Vladimir Lipunov, professor at the Sternberg Astronomical Institute at Moscow State University, is currently developing such a system.

"The Chelyabinsk event is very important, as hopefully it will make the government pay more attention to this problem," he told The Moscow Times.

Lipunov's institute has developed a concept for a new Master-3 telescope capable of detecting incoming asteroids one day before they enter the atmosphere, he said. But this telescope would need to be a complex system with land- and space-based components, and the government has not allocated any funds for its construction.

Addressing the danger that falling space objects pose, Lipunov warned ominously that "outer space is a living organism and changes every second. Asteroids are not the only threat we face."

Although Russian scientists complain of a lack of government funding, they have demonstrated some major achievements of late.

Nikolai Kardashev, one of Russia's most prominent astrophysicists, led the development of the RadioAstron, currently the largest space telescope in orbit. Launched in July 2011, it is able of providing images of the universe at 1,000 times the resolution attainable by the famous Hubble telescope.

But "in order to achieve tracking and detection capability, we need to make a system of telescopes," Kardashev said.

According to Lipunov, this can only be achieved if fundamental research receives more government support.

Contact the author at i.nechepurenko@imedia.ru

Related articles:

- [Chelyabinsk Schools, Hospitals Reopen After Meteor-Related Repairs](#)
- ['Meteorite Rush' Begins as Scientists Find Fragments](#)
- [Chelyabinsk Entrepreneurs Quick to Profit Off Meteor](#)

Original url: <https://www.themoscowtimes.com/2013/02/18/meteor-raises-security-concerns-a21658>