

Meteor strike in Russia hurts almost 1,000 (w/ Video)

February 15 2013, by Stuart Williams



Meteor streaks are seen above the desert near the Israeli Kibbutz of Ein Gedi early on December 14, 2012. A meteor shower caused explosions in the lower atmosphere above Russia's Urals region, blowing out windows in some areas and leaving several people injured, officials and agencies reported.

A plunging meteor which exploded with a blinding flash above central Russia , set off a shockwave that shattered windows and hurt almost 1,000 people in an event unprecedented in modern times.

Experts insisted the meteor's fiery entry into the atmosphere on Friday was not linked to the asteroid 2012 DA 14, which later passed about 17,200 miles (27,700 kilometres) above the Earth without incident in an unusually close approach.

But the extraordinary event brought morning traffic to a sudden halt in the Urals city of Chelyabinsk as shocked drivers stopped to watch the falling meteor partially burning up in the lower atmosphere and light up the sky.

The fall of such a large meteor estimated as weighing dozens of tonnes was extremely rare, while the number of casualties as a consequence of its burning up around a heavily-inhabited area was unprecedented.

Chelyabinsk regional governor Mikhail Yurevich, quoted by the RIA Novosti news agency, said 950 people were injured, with two-thirds of the injuries light wounds from glass shards and other materials blown out by the shockwave.

Windows were shattered by the shockwave across the city's region with the ministry saying almost 300 buildings were damaged including schools, hospitals, a zinc factory and even an ice hockey stadium.

"At 9:20 am (0320 GMT), an object was observed above Chelyabinsk which flew by at great speed and left a trail behind. Within two minutes there were two bangs," regional emergencies official Yuri Burenko said in a statement.

The office of the local governor said that a meteorite had fallen into a lake outside the town of Chebarkul in the Chelyabinsk region and television images pointed to a six-metre (20-foot) hole in the frozen lake's ice.

However it has yet to be finally confirmed if meteorite fragments made contact with the Earth and there were no reports that any locals had been hurt directly by a falling piece of meteorite.

Schools were closed for the day and theatre shows cancelled across the region after the shock wave blew out windows amid temperatures as low as minus 18 degrees Celsius (zero degrees Fahrenheit).

"Thank God that nothing fell onto inhabited areas," President Vladimir Putin said in a meeting with Emergencies Minister Vladimir Puchkov, ordering him to look into how to warn citizens about such events.

'A large object weighing tonnes'

The Russian Academy of Sciences said in a statement that it estimated the body to be several metres long and weighing several dozen tonnes. "It burned up at a height of 30-50 kilometres... but pieces could have fallen to Earth as meteorites."

The meteor explosion appears to be one of the most stunning cosmic events above Russia since the 1908 Tunguska Event, when a massive blast most scientists blame on an asteroid or a comet impact ripped through Siberia.

"I am scratching my head to think of anything in recorded history when that number of people have been indirectly injured by an object like this... it's very, very rare to have human casualties," Robert Massey, deputy executive secretary of Britain's Royal Astronomical Society (RAS), told AFP.

But he stressed that he saw "absolutely no connection" between the Chelyabinsk event and asteroid 2012 DA 14.

Live images from a telescope at the Gingin Observatory in western Australia showed the asteroid looking like a white streak.

The time of closest approach was about 2:25 pm EST (1925 GMT), said the US space agency NASA, which had called the event "the closest-ever predicted approach to Earth for an object this large."

NASA estimates an asteroid such as 2012 DA 14 flies close to Earth every 40 years on average, but only hits our planet once every 1,200 years.

Paul Chodas, a research scientist in the Near Earth Object Program Office at NASA's Jet Propulsion Laboratory in Pasadena, California, called the meteor-asteroid combination an "incredible coincidence."

Chodas said it was "virtually impossible" to spot objects such as the meteor that struck Russia, which he called a "tiny asteroid", ahead of time against a daytime sky.

With the meteor quickly a leading trend on Twitter, locals posted amateur footage on YouTube showing men swearing in surprise and fright, and others grinding their cars to a halt.

"First I thought it was a plane falling, but there was no sound from the engine... after a moment a powerful explosion went off," witness Denis Laskov told state television.

The Chelyabinsk region is Russia's industrial heartland, filled with smoke-chugging factories and other huge facilities that include a nuclear power plant and the massive Mayak atomic waste storage and treatment centre.

A spokesman for Rosatom, the Russian nuclear energy state corporation,

said that its operations remained unaffected.

The emergencies ministry said radiation levels in the region also did not change and that 20,000 rescue workers had been dispatched to help the injured and locate those requiring help.

(c) 2013 AFP

Citation: Meteor strike in Russia hurts almost 1,000 (w/ Video) (2013, February 15) retrieved 23 April 2024 from <https://phys.org/news/2013-02-meteor-shower-panic-central-russia.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.