

1

00:00:00,000 --> 00:00:16,290

This series presents information based in part on theory and conjecture.

2

00:00:16,290 --> 00:00:20,811

The producer's purpose is to suggest some possible explanations but not necessarily

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00:00:20,811 --> 00:00:30,311

the only ones to the mysteries we will examine.

4

00:00:30,311 --> 00:00:37,592

Since the first man-made nuclear blast in July 1945, scientists have chronicled the devastating

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00:00:37,592 --> 00:00:46,993

effects of an atomic explosion.

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00:00:46,993 --> 00:00:52,553

The evidence now indicates that a nuclear explosion may have occurred on Earth as early

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00:00:52,553 --> 00:01:05,314

as 1908.

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00:01:05,314 --> 00:01:10,255

In an age when satellites have become commonplace in the heavens above Earth, it is possible

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00:01:10,255 --> 00:01:20,216

to conceive of another civilization sending a distant probe to our planet.

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00:01:20,216 --> 00:01:24,876

There is a startling theory that such a probe may have arrived on Earth just after the turn

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00:01:24,876 --> 00:01:33,337

of the century and that it was programmed to land in the vast open spaces of Siberia.

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00:01:33,337 --> 00:01:38,497

In the four million square miles of Siberian tundra, there are only a handful of population

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00:01:38,497 --> 00:01:39,497

centers.

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00:01:39,497 --> 00:01:44,498

For the most part, it is a land that nature has forsaken.

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00:01:44,498 --> 00:01:51,298

A layer of permafrost descending 1,000 feet below the surface makes farming virtually

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00:01:51,298 --> 00:01:54,458

impossible.

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00:01:54,458 --> 00:02:05,059

The barren land supports very little animal life and only a small, hearty population.

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00:02:05,059 --> 00:02:09,140

The lives of the people have changed little over the hundreds of years.

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00:02:09,140 --> 00:02:18,020

The stories they tell of their past are simple tales whose origins can easily be traced.

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00:02:18,020 --> 00:02:25,501

The traders in Vanavara, a tiny hamlet 3,000 miles east of Moscow, maintain a legend, however,

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00:02:25,501 --> 00:02:31,621

that has puzzled scientists for 80 years.

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00:02:31,621 --> 00:02:42,702

They say that a bluish, cylindrically shaped object came hurtling in from outer space.

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00:02:42,702 --> 00:02:46,703

It was the morning of June 30, 1908.

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00:02:46,703 --> 00:02:56,223

At precisely 717, the object exploded.

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00:02:56,223 --> 00:03:01,144

The story of that explosion has been passed down through a generation to people who remember

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00:03:01,184 --> 00:03:02,864

it today.

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00:03:02,864 --> 00:03:06,184

Dorothy Raisinan's parents witnessed the explosion.

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00:03:06,184 --> 00:03:09,784

It was this big boom.

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00:03:09,784 --> 00:03:15,905

They couldn't see and the earth shook under them and of course they all fell down and

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00:03:15,905 --> 00:03:16,905

prayed and cried.

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00:03:16,905 --> 00:03:20,265

You know, my children got hysterical.

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00:03:20,265 --> 00:03:27,586

The sky turned kind of a dirty orange, a haze, got in there.

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00:03:27,626 --> 00:03:32,626

Old journals and daily newspapers as far away as California reported that dirty haze seemed

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00:03:32,626 --> 00:03:41,707

to settle on the horizon following the explosion.

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00:03:41,707 --> 00:03:46,067

The blast that occurred in Tunguska was so intense that it knocked people off their feet

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00:03:46,067 --> 00:03:48,388

200 miles from the blast site.

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00:03:48,388 --> 00:03:51,948

Amazingly, however, there was not one human fatality.

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00:03:51,948 --> 00:03:56,348

Whatever the object was, it struck in Tunguska in the middle of a swamp.

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00:03:56,348 --> 00:04:06,109

But it was, or how it could have caused such massive destruction, remained a mystery.

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00:04:06,109 --> 00:04:11,590

Barographs, a primitive form of seismic recorder, mechanically measured the magnitude of the

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00:04:11,590 --> 00:04:16,030

explosion as far away as London and Washington, D.C.

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00:04:16,030 --> 00:04:23,190

But they in no way adequately communicated the intensity of the event.

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00:04:23,190 --> 00:04:31,711

What did the brilliant sunsets, which painted the skies for several days after the explosion?

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00:04:31,711 --> 00:04:37,152

The first successful scientific expedition into Tunguska was not launched until 19 years

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00:04:37,152 --> 00:04:42,112

after the explosion.

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00:04:42,112 --> 00:04:54,713

In 1927, a young Russian meteorologist, Leonid Kulik, set out to prove that the massive destruction

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00:04:54,713 --> 00:04:58,913

was caused by a meteor colliding with the Earth.

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00:04:58,913 --> 00:05:08,354

Kulik's theory was fully accepted at the time as being perfectly logical.

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00:05:08,354 --> 00:05:12,795

After carefully studying the work done by Kulik and other Soviet scientists, a book

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00:05:12,795 --> 00:05:15,715

was authored on the subject by Thomas Atkins.

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00:05:15,715 --> 00:05:23,835

And also by using some information that he had acquired from a seismic station, an earthquake

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00:05:23,835 --> 00:05:32,556

station in Irkutsk in southern Siberia, he manages to locate, after a rather long and

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00:05:32,556 --> 00:05:38,317

arduous expedition, the fall point or epicenter of the explosion.

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00:05:38,317 --> 00:05:42,957

What he finds is a shattered forest.

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00:05:42,957 --> 00:05:48,717

The extent of the destruction that lay before him was mind-boggling.

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00:05:48,717 --> 00:05:53,198

He got up on a high ridge and looked out for 10 or 12 miles.

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00:05:53,198 --> 00:05:58,878

And as far as he could see toward the north, every single visible tree had been knocked

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00:05:58,878 --> 00:06:00,358

down.

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00:06:00,358 --> 00:06:08,199

He gets to the center of this destroyed forest and he finds not a crater, but something that

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00:06:08,199 --> 00:06:11,799

was far stranger and something for which he had no explanation.

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00:06:11,799 --> 00:06:19,760

He found a forest that was still upright, a dead forest.

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00:06:19,760 --> 00:06:25,000

It was here in the very epicenter of the blast that Kulik expected to find the same sort

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00:06:25,000 --> 00:06:34,761

of crater that was gouged into the Arizona landscape 50,000 years ago by a giant meteor.

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00:06:35,761 --> 00:06:43,082

4,000 feet in diameter and 600 feet deep, the Arizona crater has resisted forces of

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00:06:43,082 --> 00:06:49,762

rain and wind to remain virtually unchanged.

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00:06:49,762 --> 00:06:54,723

If a similar type of meteor had crashed in Siberia, then logically it should have left

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00:06:54,723 --> 00:06:57,443

just such a crater.

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00:06:57,443 --> 00:07:01,803

But it did not.

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00:07:01,803 --> 00:07:06,684

That fact has sparked the controversy over the origins of the Tunguska explosion which

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00:07:06,684 --> 00:07:16,605

continues today.

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00:07:16,605 --> 00:07:25,885

The information on Tunguska is still being catalogued and analyzed.

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00:07:25,885 --> 00:07:30,966

Some modern day astronomers believe, however, that Kulik was on the right track.

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00:07:30,966 --> 00:07:36,486

They maintain that a crumbly sort of meteorite, a carbonaceous chondrite, was responsible

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00:07:36,486 --> 00:07:43,767

for the explosion.

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00:07:43,767 --> 00:07:53,048

If we have a carbonaceous chondrite that is 40 or 50 feet in diameter, that's a huge object.

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00:07:53,048 --> 00:07:58,248

Ronald Oriti, who supports the meteor theory, is an associate lecturer at Griffith Park

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00:07:58,248 --> 00:07:59,248

Observatory.

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00:07:59,248 --> 00:08:04,769

It would probably totally disrupt in the atmosphere at an altitude of anywhere from 5 to 10 or

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00:08:04,769 --> 00:08:06,809

15 miles above the Earth.

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00:08:06,809 --> 00:08:11,049

The energy that it releases at that time is the same energy that would be released by

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00:08:11,049 --> 00:08:18,490

a much stronger object, an iron object, of the same mass upon striking the Earth.

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00:08:18,490 --> 00:08:23,810

So what we find with Tunguska is that we can entirely account for what took place if we

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00:08:23,810 --> 00:08:33,971

have a very soft and crumbly meteorite that explodes in the atmosphere.

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00:08:33,971 --> 00:08:36,851

Most meteors burn up before they can explode.

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00:08:36,851 --> 00:08:41,412

That fact has not escaped the notice of an equally qualified scientist, Charles Cole,

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00:08:41,412 --> 00:08:45,292

of Caltech, who supports the comet theory.

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00:08:45,292 --> 00:08:48,252

Comets are basically dirty snowballs.

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00:08:48,252 --> 00:08:53,132

They're composed mostly of water ice with some dust mixed in.

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00:08:53,132 --> 00:08:54,453

They're very fragile things.

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00:08:54,453 --> 00:08:56,013

They're not solid rocks.

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00:08:56,013 --> 00:09:00,733

This helps explain why the Tunguska event did not leave a large crater on the ground,

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00:09:00,733 --> 00:09:03,133

even though it was a very massive, violent event.

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00:09:03,133 --> 00:09:06,374

There were no large craters found.

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00:09:06,374 --> 00:09:09,374

This is because the comet exploded before it hit the ground.

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00:09:09,374 --> 00:09:14,654

The blast effect knocked down trees and people many miles from the center of the explosion.

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00:09:14,654 --> 00:09:16,374

But it did not leave much evidence on the ground.

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00:09:16,374 --> 00:09:21,055

There were no large chunks of meteorites left.

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00:09:21,055 --> 00:09:25,375

This can only be explained by the fact that the comet disappeared before it hit the ground

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00:09:25,375 --> 00:09:27,175

or as a meteorite with what's a large crater.

100

00:09:27,175 --> 00:09:30,776

The fragments scattered all over the place.

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00:09:30,776 --> 00:09:36,896

I think the comet theory is the best one simply because it explains all the facts with a minimum

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00:09:36,896 --> 00:09:42,937

number of assumptions.

103

00:09:42,937 --> 00:09:47,977

Some scientists are even willing to reach further for possible explanations.

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00:09:48,097 --> 00:09:52,857

Dr. Isaac Azimov is a physicist, mathematician, and author.

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00:09:52,857 --> 00:10:05,018

Until, say, 20 years ago, the universe we knew was very staid and stable and nothing particularly

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00:10:05,018 --> 00:10:06,658

exciting happened.

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00:10:06,658 --> 00:10:13,619

But since then, since then with the discovery of quasars in 1963, we have come to believe

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00:10:13,619 --> 00:10:20,220

and to have evidence for the fact that this is a violent universe we live in and that

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00:10:20,220 --> 00:10:24,380

there are all kinds of strange objects we didn't dream of before.

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00:10:24,380 --> 00:10:31,380

For instance, there are black holes.

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00:10:31,380 --> 00:10:37,341

The ordinary black hole was a monstrous thing with a mass equal anywhere from three times

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00:10:37,341 --> 00:10:43,581

that of the sun to billions of times the mass of the sun.

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00:10:43,581 --> 00:10:47,982

There are at least theories that there are such things as mini black holes formed at

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00:10:47,982 --> 00:10:56,823

the very moment of creation in the Big Bang 15 billion years ago.

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00:10:56,823 --> 00:11:02,863

The ravaging gases that emerged from the original Big Bang may have created sufficient compressions

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00:11:02,863 --> 00:11:08,584

here and there to squeeze small bits of matter into black holes.

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00:11:08,584 --> 00:11:14,264

Supposing one of these mini black holes that perhaps didn't have any more mass than an

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00:11:14,264 --> 00:11:24,425

asteroid came down and struck the earth, it would absorb atmospheric molecules as it dashed

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00:11:24,425 --> 00:11:33,186

through the air, heating it up and creating a terrific explosion.

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00:11:33,186 --> 00:11:36,266

Now there is no evidence that this is what happened.

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00:11:36,626 --> 00:11:41,186

In fact, to tell you the truth, there is no hard and fast evidence that many black holes

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00:11:41,186 --> 00:11:45,867

exist at all.

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00:11:45,867 --> 00:11:51,427

The explanation, however, with which Dr. Asimov feels most comfortable is the comet theory

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00:11:51,427 --> 00:11:55,307

proposed by Charles Cole.

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00:11:55,307 --> 00:12:00,468

Other explanations have been offered, particularly by Soviet scientists who have had more opportunity

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00:12:00,468 --> 00:12:05,268

to study the physical evidence.

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00:12:05,268 --> 00:12:11,349

Soviet science writer Alexander Kassansev proposed in the early 1950s that the Tunguska

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00:12:11,349 --> 00:12:16,229

blast was nuclear in origin.

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00:12:16,229 --> 00:12:28,350

But who or what could have triggered such a blast remained a mystery.

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00:12:28,350 --> 00:12:35,031

Despite the diverging opinions, scientists have one area of agreement that on June 30th,

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00:12:35,031 --> 00:12:39,471

1908, some outer space object collided with the earth.

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00:12:39,471 --> 00:12:45,191

But in order to seek a logical explanation of what happened in the Tunguska, we must

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00:12:45,191 --> 00:12:49,112

go back and analyze the blast itself.

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00:12:49,112 --> 00:12:56,672

There was a gigantic fireball, a huge pillar of fire that blossomed up into the air for

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00:12:56,672 --> 00:13:01,033

some 20 miles and was visible for several hundred miles away.

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00:13:01,033 --> 00:13:09,233

It was an instantaneous thermal flash as a result of this fireball that scorched the

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00:13:09,233 --> 00:13:13,714

forest for, again, for hundreds of miles.

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00:13:13,714 --> 00:13:19,794

There were shock waves that rushed through the forest, knocking trees down.

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00:13:26,675 --> 00:13:39,716

Russian writer Kassansev, Atkins and others have theorized that such a blast was triggered

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00:13:39,716 --> 00:13:45,316

by a nuclear device almost 40 years before the first man-made explosion.

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00:13:45,316 --> 00:13:50,397

Nowhere in Earth's history is there evidence of a spontaneous atomic blast.

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00:13:50,397 --> 00:13:58,517

The heavens, however, hold a partial answer.

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00:13:58,517 --> 00:14:03,318

Using the sun as a model, we know that all stars have for billions of years created power

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00:14:03,318 --> 00:14:05,398

through nuclear fusion.

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00:14:05,398 --> 00:14:10,198

Surrounding these stars exist planetary systems much like our own, and it is quite likely

146

00:14:10,198 --> 00:14:18,119

also that if there is other intelligent life in the galaxy, they have harnessed such a power.

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00:14:18,119 --> 00:14:24,159

The experiment that took place at Alamogordo, New Mexico in the summer of 1945 proved that

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00:14:24,159 --> 00:14:40,281

Earth scientists had found a way to trigger a nuclear explosion.

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00:14:40,281 --> 00:14:45,401

From that momentous day until the present, the atomic tests have continued, and the results

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00:14:45,401 --> 00:15:13,363

have been carefully monitored.

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00:15:13,363 --> 00:15:27,565

The link parallels can be found between man-made blasts and the event at Tunguska.

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00:15:27,565 --> 00:15:32,565

The devastation at Hiroshima provides a glimpse of what occurs at both the center and fringes

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00:15:32,565 --> 00:15:35,085

of a massive explosion.

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00:15:35,085 --> 00:15:50,647

The Hiroshima Castle was the exact detonation point.

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00:15:50,647 --> 00:15:57,727

The Soviets carefully compared the after effects both at Hiroshima and Tunguska.

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00:15:57,727 --> 00:16:01,567

At ground zero of the first blast was the Hiroshima Castle.

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00:16:01,567 --> 00:16:06,688

At charred, it remained upright even though buildings far sturdier, only a few hundred

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00:16:06,688 --> 00:16:13,368

feet away were flattened and completely destroyed.

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00:16:13,368 --> 00:16:22,529

This fact coincided perfectly with a telegraph forest effect that had so puzzled Kulik.

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00:16:22,529 --> 00:16:28,170

Evidences of accelerated plant growth in both Japan and Tunguska were observed, as were

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00:16:28,170 --> 00:16:42,491

traces of radioactive material in tree rings.

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00:16:42,491 --> 00:16:47,571

The people of Hiroshima have known almost from the very first day the deadly effects

163

00:16:47,571 --> 00:16:52,172

of a nuclear explosion.

164

00:16:52,172 --> 00:17:01,452

Coincidentally, the people of Tunguska have suffered similar after effects.

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00:17:01,452 --> 00:17:15,053

Ill health has plagued the entire family of Dorothy Raisinen.

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00:17:15,053 --> 00:17:20,934

In an effort to confirm or deny their suspicions regarding Tunguska, Soviet scientists conducted

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00:17:20,934 --> 00:17:23,374

one final experiment.

168

00:17:23,374 --> 00:17:26,614

They constructed a matchstick forest.

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00:17:26,614 --> 00:17:33,615

It was the exact scale model of the Tunguska blast site, each tiny matchstick representing

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00:17:33,615 --> 00:17:44,776

a particular stand of trees.

171

00:17:44,776 --> 00:17:54,417

They detonated an explosion at the relative altitude of the 1908 blast.

172

00:17:54,417 --> 00:18:00,057

Even to their surprise, the pattern of uprooted model trees was identical to the original

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00:18:00,057 --> 00:18:17,939

Tunguska explosion.

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00:18:17,939 --> 00:18:22,899

The evidence supported the Soviet contention that Tunguska was the result of a nuclear

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00:18:22,899 --> 00:18:24,899

holocaust.

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00:18:24,899 --> 00:18:27,299

One nagging question remained.

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00:18:27,299 --> 00:18:31,580

How could a nuclear bomb have been exploded in 1908?

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00:18:31,580 --> 00:18:36,380

Who or what would have had such a capability?

179

00:18:36,380 --> 00:18:42,861

Henry Gree is an acclaimed journalist and author of the book, *New Soviet Psychic Discoveries*.

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00:18:42,861 --> 00:18:48,541

He is the only American who has interviewed the man who took up the quest in 1956 to solve

181

00:18:48,541 --> 00:18:50,461

the Tunguska mystery.

182

00:18:50,461 --> 00:18:53,861

The Russian physicist Alexei Zolotov.

183

00:18:53,861 --> 00:19:02,942

He is a very long black beard, bold, burning black eyes, fanatical in his dedication to

184

00:19:02,942 --> 00:19:03,942

his subject.

185

00:19:03,942 --> 00:19:10,983

He has eliminated ten very interesting theories about the possibility of what had happened

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00:19:10,983 --> 00:19:14,263

on that day in 1908.

187

00:19:14,263 --> 00:19:19,144

And he has eliminated each and all of them for various very important scientific reasons

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00:19:19,144 --> 00:19:25,984

to arrive at the conclusion that his one theory is the most valid, namely that an extraterrestrial

189

00:19:25,984 --> 00:19:36,425

civilization had sent a message to Earth for us to know that there is life in outer space,

190

00:19:36,425 --> 00:19:41,185

that there is civilization in outer space which is ahead of us and which is watching

191

00:19:41,185 --> 00:19:49,906

us very benevolently.

192

00:19:49,906 --> 00:19:59,707

This is why Zolotov said this particular explosion took place at Tunguska.

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00:19:59,707 --> 00:20:04,867

Thomas Atkins explains why he believes that the Tunguska explosion resulted from an alien

194

00:20:04,867 --> 00:20:06,507

spacecraft.

195

00:20:06,507 --> 00:20:11,788

Eyewitness accounts provided him with the object's course.

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00:20:11,788 --> 00:20:18,628

Several miles above the Earth, over Siberia, it seemed to have executed an eastward turn

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00:20:18,628 --> 00:20:21,469

and then a very sharp westward turn.

198

00:20:21,469 --> 00:20:27,429

That westward turn, in fact, that took this object over the more desolate part of Siberia

199

00:20:27,429 --> 00:20:30,829

where it would do no human damage.

200

00:20:30,829 --> 00:20:35,070

They didn't know what happened.

201

00:20:35,070 --> 00:20:44,230

They thought it was the end of the Earth.

202

00:20:44,230 --> 00:20:48,111

The universe is full of strange things.

203

00:20:48,111 --> 00:20:49,111

We know that.

204

00:20:49,111 --> 00:20:52,391

We've discovered some of them in the last 20 years.

205

00:20:52,391 --> 00:20:58,112

The only way we're ever going to understand the universe is to try to keep an open mind

206

00:20:58,112 --> 00:21:00,712

and try to be ready for strange things.

207

00:21:00,712 --> 00:21:07,472

J.B.S. Haldane once said, the universe is not only stranger than we imagine, it is stranger

208

00:21:07,472 --> 00:21:17,113

than we can imagine.

209

00:21:17,113 --> 00:21:22,354

Coming up next on FBI, The Untold Stories, an agent is trapped into a dangerous meeting

210

00:21:22,354 --> 00:21:23,514

with drug traffickers.

211

00:21:23,514 --> 00:21:28,994

Then, on history's crimes and trials, one of the most elaborate hoaxes of modern times,

212

00:21:29,114 --> 00:21:34,035

Clifford Irving's claim that Howard Hughes had chosen him as a biographer.

213

00:21:34,035 --> 00:21:37,675

And later tonight, Hitler and Stalin clash in Kiev.

214

00:21:37,675 --> 00:21:42,235

Now history's mysteries reveals the secrets they thought they'd buried in the rubble.

215

00:21:42,235 --> 00:21:45,595

At 8, here on the History Channel, where the past comes alive.