



WHY IS
VENUS
CALLED
EARTH'S
EVIL TWIN?

1
00:00:00,625 --> 00:00:04,504
Why is Venus called Earth's evil twin?

2
00:00:06,218 --> 00:00:07,774
NASA.

3
00:00:07,774 --> 00:00:09,542
We Asked a NASA Scientist.

4
00:00:09,776 --> 00:00:12,212
Venus and Earth are sometimes called twins

5
00:00:12,445 --> 00:00:15,015
because they're pretty much about the same size.

6
00:00:15,048 --> 00:00:17,017
Venus is almost as big as Earth.

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00:00:17,017 --> 00:00:19,986
They also formed in the same inner part of the solar system.

8
00:00:20,020 --> 00:00:23,089
Venus is in fact our closest neighbor to Earth.

9
00:00:23,323 --> 00:00:25,659
So they were formed in the same part of the solar system,

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00:00:25,659 --> 00:00:27,427
made out of the same materials.

11
00:00:27,427 --> 00:00:29,129
They're about the same size.

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00:00:29,129 --> 00:00:32,399
So you would think that they would have turned out very, very similar.

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00:00:32,399 --> 00:00:35,101

But what happened is somewhere along the way,

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00:00:35,101 --> 00:00:37,337

they went two very different paths.

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00:00:37,470 --> 00:00:41,241

Some people like to say Venus went bad or something went wrong.

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00:00:41,274 --> 00:00:45,545

I like to say that somewhere along the way, something good happened on Earth.

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00:00:45,545 --> 00:00:49,500

But on Venus, what happened is its large, thick carbon dioxide

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00:00:49,500 --> 00:00:52,585

atmosphere is driving a greenhouse effect.

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00:00:52,952 --> 00:00:56,956

In fact, it's so hot on Venus that you can melt lead.

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00:00:56,956 --> 00:01:01,928

The temperatures on the surface of Venus are over 900 degrees Fahrenheit,

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00:01:01,928 --> 00:01:06,833

and then Venus is covered in a 15 mile thick layer of clouds.

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00:01:06,833 --> 00:01:09,302

And those clouds are made of sulfuric acid.

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00:01:09,369 --> 00:01:12,639

So it is a crazy place, but really interesting.

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00:01:12,639 --> 00:01:16,609

And we really want to understand why Venus and Earth turned out so differently.

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00:01:16,643 --> 00:01:20,713

So NASA and ESA are embarking on a decade of Venus,

26
00:01:20,713 --> 00:01:22,949
where together we're sending three missions

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00:01:22,949 --> 00:01:24,451
where we're all going to learn more

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00:01:24,451 --> 00:01:28,288
about how Venus formed, how it evolved, and why it's so different from Earth.

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00:01:28,555 --> 00:01:31,324
So why is Venus called Earth's evil twin?

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00:01:31,357 --> 00:01:34,000
Well, they're twins because they're the same size

31
00:01:34,000 --> 00:01:35,595
and they formed of the same materials.

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00:01:35,628 --> 00:01:40,233
But Venus is such a hot and crazy place, really not hospitable to life.

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00:01:40,266 --> 00:01:42,936
So that's why sometimes she's called our evil twin.