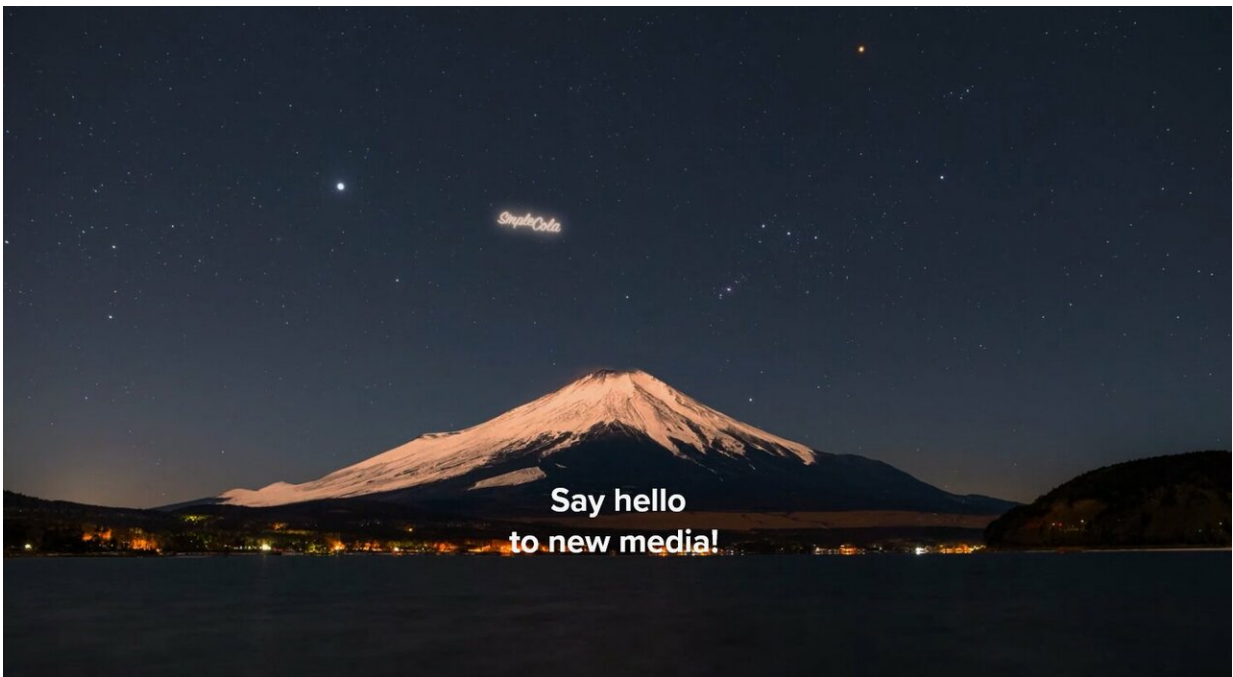


# Astronomers aren't pleased about a Russian plan to put billboards in space

January 18 2019, by Evan Gough

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Credit: StartRocket

It was bound to happen.

While the rest of us look up at the night sky, and wonder at what we're seeing, ponder how it all fits together, and strain ourselves trying to understand how our origins are intertwined with all that we see, others don't. They look up at the magnitude of the night sky and think none of

these things.

Instead they think, "Hmmm...that's a big, empty billboard. How can I make money from it?"

Russian company StartRocket is proposing to use Cubesats, [small satellites](#) with inexpensive launch profiles, to put billboards in [space](#). At an altitude of about 450 km (280 miles), the satellites would unfurl a mylar sail about 9 meters (30 ft.) long. A group of CubeSats would work together to create a single billboard, and the result would be a pixelated [billboard](#) with a viewable area of about 50 sq. km., visible in morning and evening twilight, when they catch and reflect sunlight.

StartRocket thinks of their billboards in space as the creation of a new media. The company calls them Orbital Displays, and each one would only last about a year. They would be easily visible on clear nights, but not overbearingly bright. They would be about magnitude -8, with the full moon being magnitude -13 and the sun magnitude -27.

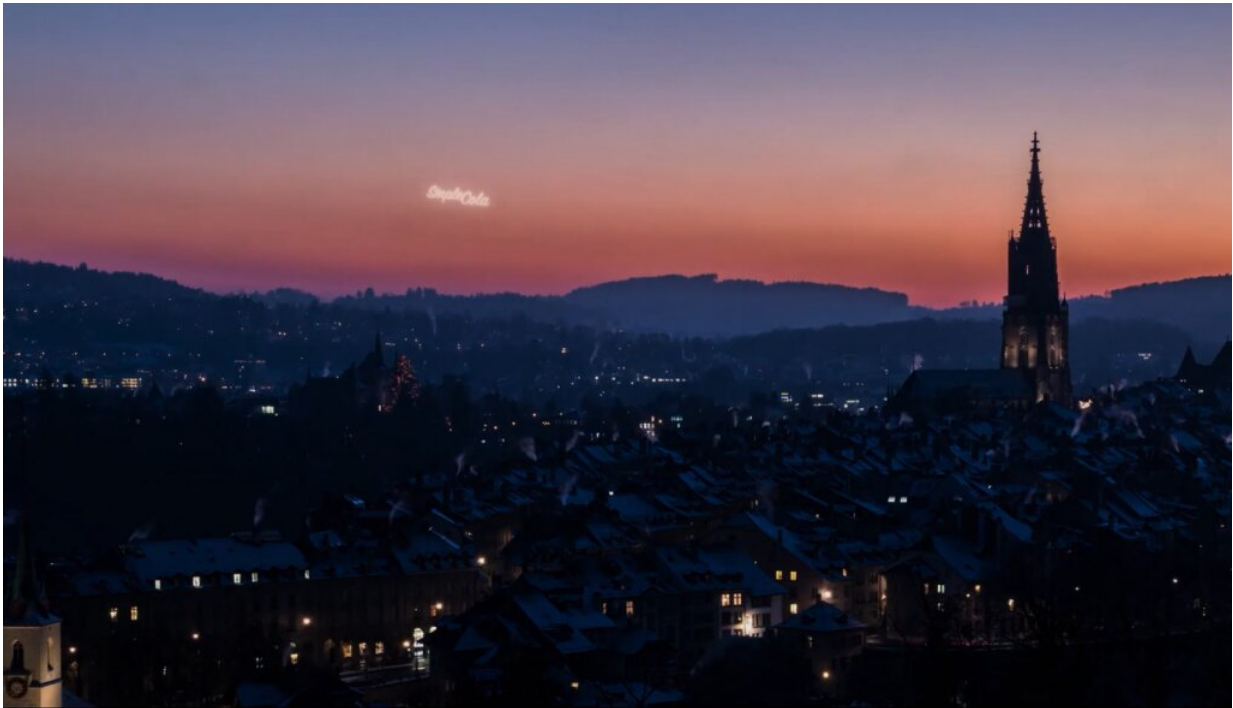
StartRocket envisions three uses for their Orbital Display system. The obvious one is advertising. Global companies will have to look seriously at taking advantage of the system, if it ever comes to fruition. Once a competitor starts using the system, others would likely follow suit. The idea may be too tantalizing to resist, from a marketing standpoint.

Another use is as entertainment, though that idea doesn't seem too well thought out. The StartRocket website says, "ENTERTAINMENT: Displaying complementary messages or images from the orbit during global events for entertaining purposes."

The third potential for these billboards in space is as an emergency warning system. In some kind of catastrophe, governments could use Orbital Displays to communicate with citizens. The website says, "When

phones don't work, during zero visibility, power cuts and catastrophic emergencies – government can use the display for urgent notifications for the population."

That seems like a bit of a stretch. How quickly is a government supposed to arrange a [rocket launch](#), and how quickly is the company supposed to build and configure CubeSats, in the middle of a catastrophic emergency? And if, as the website says, the orbitals displays would be useful "during zero visibility," how on Earth will anyone see the emergency message?



A screen capture from a promotional video on StartRocket's website. Credit: StartRocket

**Billboards in Space? Billboards Against Humanity!**

The response to the proposal has been almost universally negative. Astronomers are against it, because the increasing number of objects in the night sky make observing and studying the universe incrementally more difficult.

The Dark Sky Association, which advocates against just this sort of idea, sent out this tweet:

From adding to the erasure of our night sky heritage to being a threat to the ability to do astronomical research from the ground, dark sky advocates & astronomy experts explain why billboards in space will contribute to problems caused by light pollution.

<https://t.co/RPd82I344c>

— IDA Dark-Sky (@IDADarkSky) [January 17, 2019](#)

Others are against billboards in space because of how unnatural it seems. Must every natural space be exploited in order to promote more products? Can't some of nature be left to enjoy the way it is? Can't we be left alone to ponder the night sky, without being subjected to advertising?

There are a growing number of satellites and a growing amount of debris in orbit. Most of the satellites serve some purpose, like communications or science. And with launches getting cheaper, and satellites getting smaller, the number of satellites is bound to keep growing.

SpaceX alone has plans to launch over 7,000 CubeSats into space. And there've been proposals to put other objects into space that serve no practical purpose. But at some point, we have to put the brakes on. Just because space is more accessible than ever doesn't mean we should exploit it to such a degree.

## **"What an Abomination!"**

If comments under the promotional video are any indication, almost nobody likes the idea. Here's a sample:

- "what a vile bastards!"
- "OMG, This is so stupid..."
- "What a stupid idea guys. Think of something useful"
- "What an abomination. What is wrong with you?"

Looking past the outrage and the promotional message around the whole idea brings some sobering questions.

StartRocket is a start-up. They have no engineering or technology background. Can they make the idea work? How will they keep the CubeSats in formation? The only thing worse than making your way to a natural place away from light pollution to enjoy the night sky and seeing a Kentucky Fried Chicken ad flying over-head, would be to see the same ad made into an unrecognizable, annoying jumble by the changing positions of the CubeSats.

## **StartRocket's Timeline**

StartRocket thinks they can get the whole idea off the ground and into space by mid-2021.

In the end this may just be a crazy idea, as StartRocket CEO Vladilin Sitnikov himself describes it. Or, it may be something else.

This may just be a promotional idea for something that never comes to fruition. In marketing, creating a buzz and getting attention can serve

many purposes, like boosting a stock price for example, or attracting investors. In StartRocket's case, there's no way of knowing how serious they are, or what their overall objective is.

In the end, if StartRocket develops a feasible way of placing cubesat billboards in space, there's only one way for opponents to stop them.

The whole thing will only work if they get enough paying clients. If large brands are willing to pay to use the system, then StartRocket will service that need. Public pressure on those same large brands would make them reconsider the idea, and maybe bring the whole endeavour to a halt.

On the other hand, most people on Earth live in cities now, where [light pollution](#) obscures many of the features of the [night sky](#). It may be that many people will be indifferent to the idea. We're surrounded by advertising anyway. They're just more billboards, and they'll be kind of cool 'cause they're in space.

Time will tell.

Source Universe Today

Citation: Astronomers aren't pleased about a Russian plan to put billboards in space (2019, January 18) retrieved 25 April 2024 from <https://phys.org/news/2019-01-astronomers-russian-billboards-space.html>

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