

Venus Vacation Recommended

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A lot of attention has recently been directed toward Mars, one of our neighboring planets. America has had unprecedented success in sending orbiters and landers to the red planet. We have learned a great deal about Mars and its geological history. Both NASA and Space X, a private firm, have plans to send a human mission to Mars in the next 20 years.

But Earth has another neighbor, Venus, that should be getting a lot more attention than it currently is. The brightest star in the sky that you see just after sunset this spring is Venus. At the end of the last century, Russian scientists were successfully orbiting the planet, landing surface probes that tested the soil and atmosphere, and sending back photos. We have learned a lot about this planet too.

Once portrayed as a tropical paradise beneath its permanent cloud layer, we now know that Venus has a truly hellish environment. Temperatures exceed 800 degrees Fahrenheit day and night, hotter than Mercury which is much closer to the sun. Venus has several times more active volcanoes than Earth, constantly spewing carbon dioxide and sulfur aerosols into the sky. Actual droplets of sulfuric acid form in the upper atmosphere.

Venus' atmosphere is composed of 96% carbon dioxide, a proven green-house gas. Carbon dioxide absorbs infrared radiation (as does methane and water vapor). Sunlight raining down on a planet's surface strikes the surface and warms it. The surface then radiates most of this energy back out into space in the form of infrared radiation, keeping the planet from heating up. But if some of this radiation gets absorbed by carbon dioxide, methane and water vapor molecules floating around in the atmosphere, it gets radiated back down toward the planet's surface. The result is that the planet begins to warm. The poster-child for this greenhouse warming is our neighboring planet, Venus.

So when Scott Pruitt, our newly appointed head of the Environmental Protection Agency, states categorically that carbon dioxide doesn't cause global warming, he is either lying or showing his total ignorance of scientific facts. When President Trump rolls back Obama's order to energy companies to cap methane emissions, he too is showing his ignorance. Both should spend a week on Venus. In fact, anyone who believes climate change is a hoax might benefit from a Venus Vacation. Decades of scientific research by tens of thousands of scientists from dozens of countries and reams upon reams of data clearly dispute any allegations of "hoax" or "conspiracy". Climate change is real.

You might prefer to believe your "alternative facts" about how nature works. Nature could care less. But to continue driving down the highway after passing a sign that says "Bridge Out. Road closed ahead.", believing that the sign is "false news" and that you can make it across the gorge by relying on your own "alternative facts", all I can say is "It's your funeral." Unfortunately, with global climate change, all of humanity is facing the consequences.