

# Aplanetruith.info

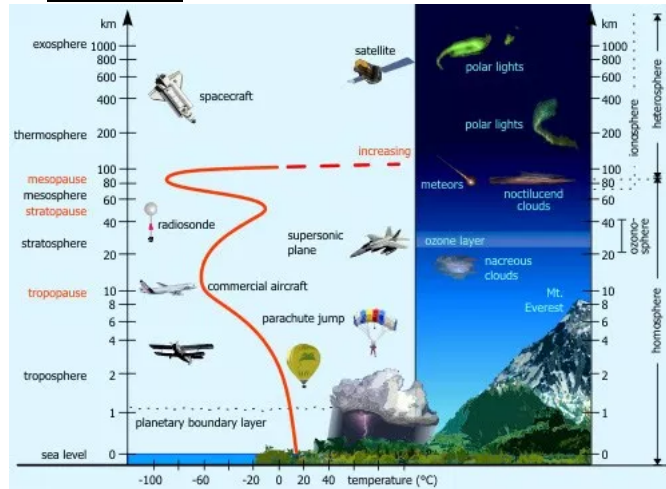
A Plane not A Planet

## #30 How Do Satellites Survive 4,000F + Degree Heat in Space?

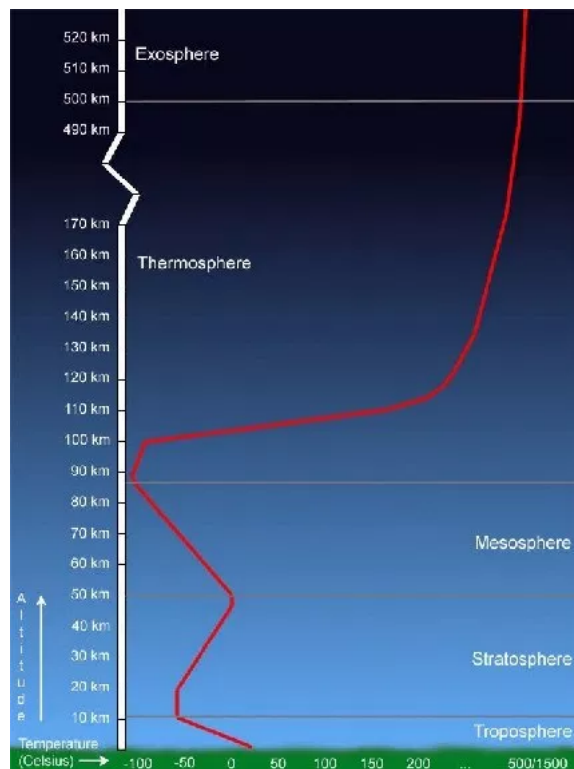
gravity, NASA, Photos

April 15, 2015

Comments: 38



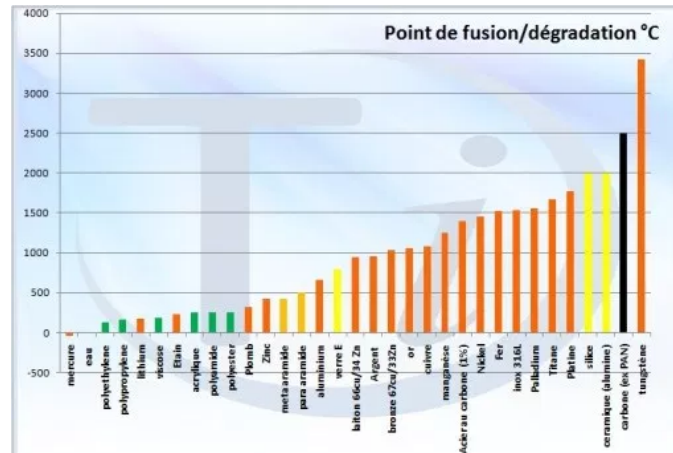
Since the launch of Sputnik in the 1950s, thousands of satellites have been put into orbit around the Earth and even other planets. Each has served a different purpose, from complex space stations like the International Space Station to the Global Positioning System. Most satellites can be considered to be “in space”, but in terms of the Earth’s atmosphere, they reside in either the thermosphere or the exosphere. The layer through which a satellite orbits depends on what the satellite is used for and what kind of orbit it has.



The thermosphere is a region of very high temperature that extends from the top of the mesosphere at around 85 kilometers up to 640 kilometers above the Earth’s surface. It is called the thermosphere because temperatures spike to thermal levels

Temperatures are highly dependent on solar activity, and can rise to 2,000 °C (3,630 °F). Radiation causes the atmosphere particles in this layer to become electrically charged (see [ionosphere \(https://en.wikipedia.org/wiki/Ionosphere\)](https://en.wikipedia.org/wiki/Ionosphere)), enabling [radio waves \(https://en.wikipedia.org/wiki/Radio\\_wave\)](https://en.wikipedia.org/wiki/Radio_wave) to bounce off and be received beyond the horizon. In the exosphere, beginning at 500 to 1,000 kilometres (310 to 620 mi) above the Earth's surface, the atmosphere turns into [space \(https://en.wikipedia.org/wiki/Outer\\_space\)](https://en.wikipedia.org/wiki/Outer_space).

The highly diluted gas in this layer can reach 2,500 °C (4,530 °F) during the day.. (Source) (<http://science.opposingviews.com/layer-earths-atmosphere-artificial-satellites-orbit-earth-2287.html>)



The only [elements in the periodic table \(http://en.wikipedia.org/wiki/Melting\\_points\\_of\\_the\\_elements\\_%28data\\_page%29\)](http://en.wikipedia.org/wiki/Melting_points_of_the_elements_%28data_page%29) that can withstand 2500°C are carbon, niobium, molybdenum, tantalum, tungsten, rhenium, and osmium. Except for carbon, these metals are very, very heavy and are of course extremely conductive to heat and most are [very ductile when heat treated \(http://en.wikipedia.org/wiki/Annealing\\_%28metallurgy%29\)](http://en.wikipedia.org/wiki/Annealing_%28metallurgy%29) meaning they bend and coil. [Carbon \(http://en.wikipedia.org/wiki/Carbon\)](http://en.wikipedia.org/wiki/Carbon), even has the highest thermal conductivities of all known materials! So, if you want to cook someone very efficiently and quickly, there is nothing better than a space capsule made out of graphite.



NASA's blast furnace-proof International Space Station

The solar panels which adorn these machines would barely function even if they could keep it together long enough. A British company found [a drop of 1.1% of peak output \(http://greenliving.nationalgeographic.com/effects-temperature-solar-panel-power-production-20500.html\)](http://greenliving.nationalgeographic.com/effects-temperature-solar-panel-power-production-20500.html) for every increase in degrees Celsius of photovoltaic solar panels once the panels reached 42°C, and of course at 1414°C [silicon actually melts. \(http://web.mit.edu/newsoffice/2010/melting-silicon-0802.html\)](http://web.mit.edu/newsoffice/2010/melting-silicon-0802.html) But wait... the Hubble Telescope and satellites uses [gallium arsenide \(http://hubblesite.org/hubble\\_discoveries/science\\_year\\_in\\_review/pdf/2006/about\\_the\\_hubble\\_space\\_telescope.pdf\)](http://hubblesite.org/hubble_discoveries/science_year_in_review/pdf/2006/about_the_hubble_space_telescope.pdf) instead of silicon which melts at an even lower temperature of 1238°C ([https://www.google.ie/search?q=mel%3Bting+point+of+gallium+arsenide&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a#client=firefox-a&hs=mAa&rls=org.mozilla:en-US:official&q=melting+point+of+gallium+arsenide&spell=1&sa=X&ei=TMxtUYb8DsbfE0XU64GQAQ&ved=0CCsQBSgA&bav=on.2.or.r\\_qf.&bvm=bv.452181](https://www.google.ie/search?q=mel%3Bting+point+of+gallium+arsenide&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a#client=firefox-a&hs=mAa&rls=org.mozilla:en-US:official&q=melting+point+of+gallium+arsenide&spell=1&sa=X&ei=TMxtUYb8DsbfE0XU64GQAQ&ved=0CCsQBSgA&bav=on.2.or.r_qf.&bvm=bv.452181))

Excuse number one comes from a few websites such as [Wikipedia \(https://en.wikipedia.org/wiki/Thermosphere\)](https://en.wikipedia.org/wiki/Thermosphere) who wish to insult our intelligence to the max. Here is the main explanation for why satellites aren't converted into man-made meteorites:

*The highly diluted gas in this layer can reach 2500°C (4530°F) during the day. Even though the temperature is so high, one would not feel warm in the thermosphere, because it is so near vacuum that there is not enough contact with the few atoms of gas to transfer much heat.*

Errr... wait a minute. I thought it is the sun that causes those few atoms of gas to heat up to 2500°C? Oh, it is.

*Thermospheric temperatures increase with altitude due to absorption of highly energetic solar radiation.*

The source of the heat of the thermosphere is not a few atoms of gas. **It is the sun!**

Here is Wiki's explanation of heat, that is not really heat when in space due to the all correcting and pacifying "vacuum" of space...which really isn't a vacuum at all:

*The highly diluted gas in this layer can reach 2,500 °C (4,530 °F) during the day. Even though the temperature is so high, one would not feel warm in the thermosphere, because it is so near vacuum that there is not enough contact with the few atoms of gas to transfer much heat. A normal [thermometer \(http://en.wikipedia.org/wiki/Thermometer\)](http://en.wikipedia.org/wiki/Thermometer) would be significantly below 0 °C (32 °F), because the energy lost by thermal radiation would exceed the energy acquired from the atmospheric gas by direct contact.*

Even NASA themselves admit this in their [question and answer \(http://helios.gsfc.nasa.gov/qa\\_sp\\_ht.html\)](http://helios.gsfc.nasa.gov/qa_sp_ht.html) session at question 3:

*Heat travels through a vacuum by infrared radiation. The Sun (and anything warm) is constantly emitting infrared, and the Earth absorbs it and turns the energy into atomic and molecular motion, or heat.*

So much for that excuse. They realize that there will be a few multi-cellular brained human beings out there that will see straight through this, so they'll need reserve explanations. Enter Dr. Eberhard Moebius ([http://helios.gsfc.nasa.gov/qa\\_sp\\_ht.html](http://helios.gsfc.nasa.gov/qa_sp_ht.html)) at question 5. who says,

*...this is the second secret of the vacuum bottle (or thermos): while the vacuum suppresses heat exchanges by conduction and air convection, exchange by radiation is suppressed by the shiny metallic coating of the bottle. This shiny coating reflects the heat radiation like a mirror and keeps it either inside the bottle (if the content is hot) or outside (if the content is cold).*

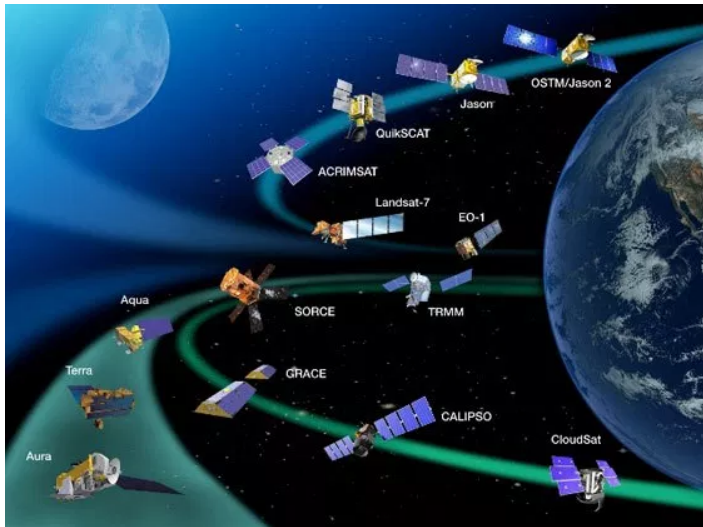
But none of NASA's orbiting machines are completely covered in a layer of IR reflecting materials, only a bit of aluminum foil for the Hubble Telescope. Even if the foil could withstand 1500°C radiating heat, it certainly wouldn't be able to stop conducting the heat from the the other materials of the telescope, especially those lovely infra-red absorbing dark areas, copper foil ([http://www.ehow.com/info\\_8044395\\_materials-absorb-infrared-rays.html](http://www.ehow.com/info_8044395_materials-absorb-infrared-rays.html)), plastic coated wires, and tarnished metal; and how about that same aluminum foil reflecting light back onto the telescope itself! Solar cooker (<https://www.google.ie/search?q=Solar+cooker&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&um=1&ie=UTF-8&hl=en&tbm=isch&source=og&sa=N&tab=wi&ei=eMZyUaSsK4Pu0gWE7YHgBO&biw=1366&bih=630&sei=esZyUbrLCMWf0QX-woGwBQ>) anyone? There is so much wrong with the picture below that it is beyond words:



Dave, why haven't we vaporized into white hot piles of meteoric ash?

Because we are in a swimming pool, Ivan.

Ah, for a minute there I almost forgot. (source) (<http://www.wildheretic.com/space-machines-do-not-orbit-the-earth/>)

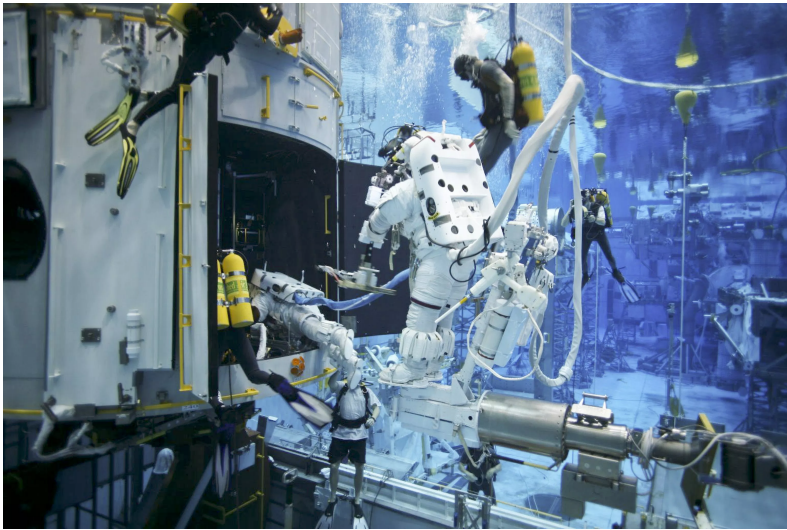


20,000 + satellites in orbit

Satellites are made of gold, titanium, aluminum and carbon fibers

Travel at 17,500 mph to stay in Earths orbit

Astronots train in NASA pool for space flight



Which also doubles as to carry out the ISS Space Station Hoax

International Space Station Hoax : Air Bubbles Rise- Space Walk...

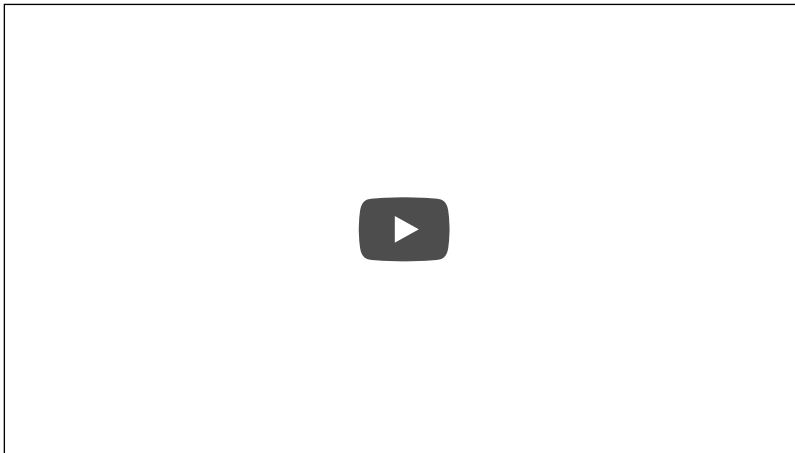
## NASA hoax ISS Actornaut Chris Cassidy accidentally admits they are filming in the USA BUSTED

NASA hoax ISS Actornaut Chris Cassidy accidentally admits they...

### Summary

- o After 100km altitude it starts to get very hot. At 110km it is 200°C. At 500km it is somewhere between 500°C and 1500°C or more. This is the thermosphere.

- o The cause of this heat is the extra solar radiation above the ionosphere, closer distance to the Sun, and above all the vacuum of space which doesn't allow the heat to radiate away fast enough or allow a lower pressure differential with increasing altitude.
- o Space machines are said to orbit between 120 and 35000km+ altitude making them traveling furnaces and obviously a pure fabrication if said orbital altitudes are correct.
- o Possible counterarguments against a hot thermosphere are: **1.** Invisible stars at high altitude may be responsible for lower heat at same said height; although possible white hot asteroids orbiting the Sun and the detection of the extra sunlight intensity make this unlikely. **2.** Long time spans make heating objects very slow and unnoticeable; although it only takes a few months to heat up convective air on the ground from one season to another – in space heat can only be radiated away.
- o Above 100km altitude, objects are said to freefall along the curve of the Earth if initially traveling laterally at over 28000 kph. Falling is an acceleration making those objects that have been orbiting for years travel many times the standard speed of light.
- o One model of the vacuum at 400km is estimated to be one trillion trillionth of the air density at sea level allowing for an extremely high terminal velocity.
- o The easiest way to detect fake NASA footage is to compare it to the control videos of high altitude weather balloons – if not similar then fake.
- o There are numerous red flags when analyzing space footage that is not similar to the control: **1.** Conclusive bubbles in space. **2.** Swimming astronauts kicking their legs. **3.** Lady astronaut hair behaving in a totally different way than hair at zero gravity on an airplane. **4.** Chris Hatfield caught with wires sticking out his shirt. **5.** Chris Cassidy's Freudian admission of real location.
- o There are very few genuine photos of the Earth as a globe, despite 3700 satellites having been launched over the decades (1100 still in operation, although [6,578](http://en.wikipedia.org/wiki/Satellite#Space_Surveillance_Network) ([http://en.wikipedia.org/wiki/Satellite#Space\\_Surveillance\\_Network](http://en.wikipedia.org/wiki/Satellite#Space_Surveillance_Network)), are said to have been ever launched into orbit). Any orbiting distance from [6200km away](http://www.ringbell.co.uk/info/hdist.htm) (<http://www.ringbell.co.uk/info/hdist.htm>), or more would show the whole ball Earth.
- o There is no video of the globe Earth, only animations of photo sets.
- o There are only two sets of photos of globe Earth (known to the author) said to be genuine: **1.** Those taken from the Apollo missions, and **2.** Those from the 1990 Galileo satellite.
- o The Blue marble 2012 globe Earth picture is a composite of much, much smaller and nearer to Earth satellite photos from various instruments, layered and tweaked.
- o The Apollo moon landings are a farce due to the thermosphere and common sense.



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JudithResnik\_30years.jpg



JudithResnik\_30years\_B.jpg

[Is It Possible?](http://www.cluesforum.info/viewtopic.php?f=23&t=935&start=705#p2393699) (<http://www.cluesforum.info/viewtopic.php?f=23&t=935&start=705#p2393699>).

Would you be surprised if it turned out that Judith Resnik – “the first jewish woman in space” (and alleged Challenger-disaster-victim) is still alive and well? That she's been involved in movies, such as Doug Liman's “Fair Game” (a 2010 Hollywood blockbuster starring Sean Penn / Naomi Watts involving a female covert CIA agent and “yellowcake uranium for making nuukular bombs”) which won the “Freedom of Expression Award” ? That she's today a highly-honored academic and the ‘Arthur Liman Professor of Law’ at Yale Law School?

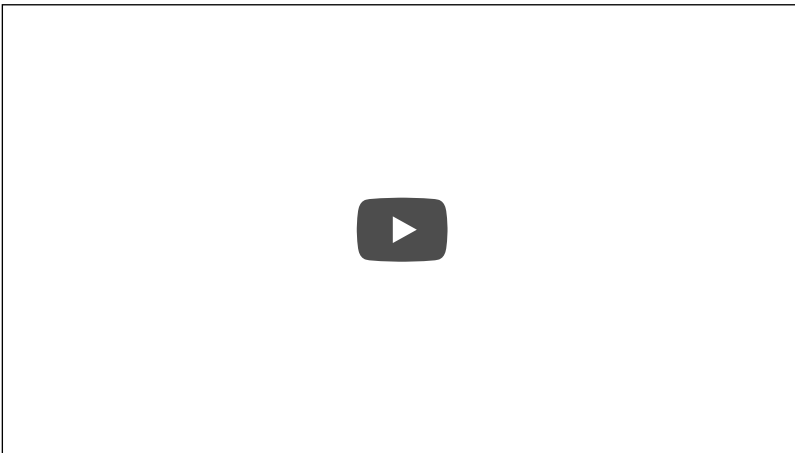
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What about Challenger astronot Michael J. Smith?



During his 18 years in the college, Michael J. Smith has advised 80 master's and PhD students. Recently, a group of those students honored him with a surprise party and an award for excellence in holistic education. "He respects you as an equal and gives you the freedom to explore your interests, challenge his ideas and talk to other professors. His door is always open," says a former PhD student.

<http://www.engr.wisc.edu/michaelsmithbio2003.html> (<http://www.engr.wisc.edu/michaelsmithbio2003.html>)



Tagged: [challenger](https://aplanetruth.info/tag/challenger/) (<https://aplanetruth.info/tag/challenger/>), [ISS](https://aplanetruth.info/tag/iss/) (<https://aplanetruth.info/tag/iss/>), [Iss Hoax](https://aplanetruth.info/tag/iss-hoax/) (<https://aplanetruth.info/tag/iss-hoax/>), [judith resnick](https://aplanetruth.info/tag/judith-resnick/) (<https://aplanetruth.info/tag/judith-resnick/>), [judy resnick](https://aplanetruth.info/tag/judy-resnick/) (<https://aplanetruth.info/tag/judy-resnick/>), [thermosphere](https://aplanetruth.info/tag/thermosphere/) (<https://aplanetruth.info/tag/thermosphere/>).

## 38 thoughts on “#30 How Do Satellites Survive 4,000F + Degree Heat in Space?”

1. **Julien** April 18, 2015 at 11:42 am [Reply](#).

“The source of the heat of the thermosphere is not a few atoms of gas. It is the sun!”

That is absolutely correct. The highly diluted gas particles in the thermosphere are heated by sun radiation until they become so hot that their own radiation compensates the part of radiation that they receive from the Sun. Thus the temperature of 2,500 °C corresponds to the point where there is an equilibrium between the absorbed radiation (due to the Sun) and the emitted radiation (due to the particle's temperature). Indeed, single air particles have no other way to evacuate heat than to radiate it away.