

Re: why people pretend that the moon landing was for real

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2005-05/msg01701.html>

- *From:* "Koobee Wublee" <kublai@xxxxxxx>
 - *Date:* Sun, 22 May 2005 15:54:15 -0700
-

"Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxxxx> wrote in message [news:d6qm7f\\$etq\\$1@xxxxxxxxxxxxxxxxxxxx](mailto:news:d6qm7fetq1@xxxxxxxxxxxxxxxxxxxx)

- >
- > The power radiated from a body with temperature T is:
- > $P_e = E \cdot \sigma \cdot A \cdot T^4$
- > where:
- > E is the emissivity
- > $\sigma = 5.67 \cdot 10^{-8} \text{ W}/(\text{m}^2 \cdot \text{K}^4)$
- > A is the surface area of the body.
- >
- > The power absorbed by a body 1AU from the Sun is:
- > $P_a = E \cdot S_o \cdot A_c$
- > where
- > E is the emissivity
- > S_o is the solar constant = $1.37 \cdot 10^3 \text{ W}/\text{m}^2$
- > A_c is the area of the cross section of the body
- > perpendicular to the direction to the Sun
- >
- > The body will be in thermal equilibrium when $P_e = P_a$
- > $E \cdot \sigma \cdot A \cdot T^4 = E \cdot S_o \cdot A_c$
- > $T^4 = (S_o/\sigma) \cdot A_c/A = 2.42 \cdot 10^{10} \cdot A_c/A \text{ K}^4$
- >
- > The ratio A_c/A depend on the shape and orientation of the body.
- >
- > For a sphere $A_c/A = 0.25$
- > $T = 279\text{K}$ or 6 deg C. Chilly, but not freezing.
- >
- > For a cube $A_c/A = 1/6 = 0.167$
- > $T = 252\text{K}$ or -21 C. Freezing!
- >
- > For a cylinder with length 4 radii:
- > $A_c/A = \text{ca. } 0.25$ if its length axis is perpendicular to the Sun.
- > $T = 279\text{K}$ or 6 C.
- > $A_c/A = 0.1$ if its length axis points to the Sun.
- > $T = 222\text{K}$, or -51 C. Freezing indeed!!
- >
- > So what temperature Apollo 13 would approach depend

Re: why people pretend that the moon landing was for real

- > on its exact shape and orientation. But it would
- > most probably be below zero degree C.

Excellent post. Thanks for correcting me. I had no idea thermal radiation could be that high. I thought it was only limited by black body radiation.

The following is from the other post.

"Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxxxx> wrote in message [news:d6qmc8\\$etq\\$2@xxxxxxxxxxxxxxxxxxxxx](mailto:news:d6qmc8etq2@xxxxxxxxxxxxxxxxxxxxx)

- >
- > 1. The Apollo mission is a hoax because the radiation in and beyond
- > the Van Allen belts is so high that the astronauts would have died.

Do you have a better explanation? I don't.

- > 2. The high radiation in the Van Allen belts is a hoax made by
- > the manufacturers of communication satellites.

No, communication satellites operate beyond the Van Allen Belts in the geosynchronous orbit. The article I presented has not referenced to Van Allen Belts as a consideration of radiation source. Got any better ideas?

- > Have I got your point?
- > Is it "everything is a hoax"?

Not necessarily.

• *Follow-Ups:*

- ◆ ***Re: why people pretend that the moon landing was for real***
◇ From: Paul B. Andersen

• *References:*

- ◆ ***Re: why people pretend that the moon landing was for real***
◇ From: Paul Cardinale
- ◆ ***Re: why people pretend that the moon landing was for real***
◇ From: Koobee Wublee
- ◆ ***Re: why people pretend that the moon landing was for real***
◇ From: Dirk Van de moortel
- ◆ ***Re: why people pretend that the moon landing was for real***
◇ From: Koobee Wublee
- ◆ ***Re: why people pretend that the moon landing was for real***

Re: why people pretend that the moon landing was for real

Re: why people pretend that the moon landing was for real

◇ *From:* Paul B. Andersen

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Koobee Wublee

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Bilge

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Koobee Wublee

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Bilge

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Koobee Wublee

◆ ***Re: why people pretend that the moon landing was for real***

◇ *From:* Paul B. Andersen

- Prev by Date: ***Re: SR Postulate on Speed of Light***
- Next by Date: ***Re: relative motion and aging***
- Previous by thread: ***Re: why people pretend that the moon landing was for real***
- Next by thread: ***Re: why people pretend that the moon landing was for real***
- Index(es):
 - ◆ ***Date***
 - ◆ ***Thread***