

Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks

Source: <http://sci.tech-archive.net/Archive/sci.space.policy/2005-08/msg00264.html>

- *From:* spinoza1111@xxxxxxxxxx
 - *Date:* 1 Aug 2005 23:29:45 -0700
-

Eric Chomko wrote:

> spinoza1111@xxxxxxxxxx wrote:

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> : > : > : > : Joe Strout wrote:

> : > : > : > : > In article <42dcb390.80743252@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

> : > : > : > : > simberg.interglobal@xxxxxxxxxx (Rand Simberg) wrote:

> : > : > : > : >

> : > : > : > : > >The problem being we don't know how to prevent an Earth st=

> : rike. Recent

> : > : > : > : > >research has discovered that the Bruce Willis prevention

> : > : > : > : >

> : > : > : > : > > Yes, we do, as long as we aren't so ignorant as to think th=

> : at

> : > : > : > : > > Hollywood is a useful guide as to methods by which to do so.

> : > : > : > : >

> : > : > : > : > > <rest of ignorance of orbital mechanics snipped>

> : > : > : > : >

> : > : > : > : > > But Rand, you snipped the best part:

> : > : > : > : >

> : > : > : > : > > ...could very well make one Earth strike into many Earth and

> : > : > : > : > > Moon strikes, where the latter through tidal effects could =

> : have further

> : > : > : > : > > bad effects.

> : > : > : > : >

Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks

> : > : > : > : > : > Hee hee! It's good to start the day with a laugh.
> : > : > : >
> : > : > : > : Especially if the rest of the day you spread cheek to people wh=
> : o think
> : > : > : > : like a manager and not an engineer. OK, a Moon strike would not=
> : change
> : > : > : > : the tides. As a layman who pays your goddamn salary, I find thi=
> : s a
> : > : > : > : surprise and I await your answer, for that is what usenet is fo=
> : r=2E
> : > : > : >
> : > : > : > Allow me. You need to get a better understanding how little there=
> : is in
> : > : >
> : > : > : Excuse me. I have been well aware since university and before how f=
> : ar
> : > : > : apart planets are, and to a lesser extent. asteroids.
> : > : >
> : > : > : Unfortunately, you are projecting a complex three-dimensional syste=
> : m,
> : > : > : that includes unknown subplanetary objects, onto a simplistic linear
> : > : > : scale.
> : > : >
> : > : > No, a simple euclidean scale, or even a Newtonian one which lacks
> : > : > Einsteins gravitational warps or bends.
> : >
> : > : ...in which IF you haven't inventoried all subplanetary objects THEN
> : > : you have...nondeterminism.
> : >
> : > Your implication about Deep Impact is that we've somehow decreased our
> : > chances of survival by sending a probe into comet. The notion is false on
> : > its face!
>
> : No, my implication is that we seem in the past to have decreased our
> : chances of survival by treating nature-on-Earth as a dead system. We
> : found for example that DDT kills disease vectors. We did not realize
> : the impact this would have on biodiversity.
>
> Which has nothing to do with a probe hitting a comet several AU from the
> earth!

Methodologically, it does. Dude, we've just discovered a new planet, or planet-like object (larger than Pluto). Its working name is Xena because the geeks who discovered it at Palomar thought Xena (Warrior Princess) was hot (as did I). Its official name is secret because it is under review by the international body responsible for planet names.

See International Herald Tribune (or New York Times) *circa* 8-1-2005.

The point being that we do not know enough about the risks of destructive stunts because our knowledge of bodies in space is

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incomplete.

>

> : My implication is that IF space is NOT a dead system then we might

> : learn from the past.

>

> We do, by knocking bits off the surface of comets with a probe.

No, we learn from the past by acquiring maturity and learning that "dead" nature (whether on Earth or in space) might be "live" in the (scientifically verifiable) sense of taking steps to defend its teleology, steps we cannot anticipate.

>

> : Sure, Deep Impact probably, to several decimal places, will not effect

> : life on earth. My thesis is that it continues and sets a precedent of

> : preferring destructive and invasive space exploration (that is subject

> : to Heisenbergian effects, metaphorically and in the large) and this

> : increases the probability of the Empire (of space) Striking Back, for

> : this is what systems, as opposed to Newtonian assemblages, tend to do.

>

> The solar system is not a biological living thing despite what you have

> seen on Star Wars.

How do you know, and what are the consequences of being wrong?

>

> : > : Probability good: $10e-5$: probability bad $10e-4$. Probability diff: order

> : > : of magnitude. Hmm, big difference in terms of the inputs.

> : >

> : > It is probably closer to $10e-25$ and $10e-26$, though you are correct about

> : > the order of magnitude.

>

> : But: note that until very recently, the past couple of years in fact,

> : "getting hit by lightning" was a metaphorical way of speaking of the

> : very rare occurrence.

>

> Not as rare as being struck from outer space by anything.

Take a look at the moon which like other bodies without atmosphere contains a permanent record of asteroid strikes. Sure, the number of craters and subcraters has to be considered in relation to aeons, but the "rarity" is NOT zero.

>

> : Last week, here in Hong Kong, a fire and rescue team had to run across

> : an open field in relays to a burning house, timing its runs to be in

> : the interval between lightning flashes (measured by averaging the times

> : before), because the lightning was so "improbably", so "unusually",

> : heavy.

>

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- > Lightning is ALWAYS happening on earth someplace all the time. It is a
- > never ending event. Get it? Objects from outer space don't nearly hit the
- > earth at a rate even close to constant.

No, violent storms and hence lightning are on the increase as a result of human impact on climate change, a human impact which resulted from Newtonian beliefs that until proven otherwise, a natural phenomenon was not an interlinked system.

Connect the dots. During the SAME WEEK when several scout leaders were killed in a violent storm that downed a power line on their tent, Hong Kong police had to improvise a special drill for crossing an open field to avoid lightning in a storm that would be considered quite unusual in the past.

- >
- > : Today (July 30th) we read (International Herald Tribune) that Mumbai
- > : received in a few hours more rain that London receives in one year.
- >
- > : The increase in lightning strikes and the heavy rains have, it is now
- > : known in the sense of being acknowledged by global science, resulted
- > : from human impact on climate change. Period.
- >
- > Which has nothing to do with Deep Impact. Nothing! If you feel that NASA

The very idea of "relevance" ("that has 'nothing to do'") is itself an artifact of Newtonian reassurances that the behavior of the system is fully satisfied by the known equations.

- > is contributing to the industrial gas output to our atmosphere, then I'd
- > say that you're about 180 degrees wrong as it is NASA satellites that are
- > telling us about GloBal Climate Change.

NASA is a macho diversion from the mess we are making on Earth and the irresponsibility of the Bush administration in not signing Kyoto.

- >
- > : The point being that a "small" effect, including a preference for the
- > : destructive stunt, becomes a large effect when it sets a precedent and
- > : when the system effected contains unknown amplifiers of the "small"
- > : effect, such as an unknown asteroid.
- >
- > No, that is what you believe to be true, in the face of no scientific
- > evidence to back it up. You are claiming that astronomical events in space
- > will have meteorological consequences with nothing to link them.

Oh? Then you are unaware of discoveries in the 1930s that a number of craters in the American southwest were the results, meteorological results, of astronomical phenomena, and not the result of geologic processes. As recently as 1905, in Siberia, an astronomical event had meteorological consequences.

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The point is not the frequency of these events, which is high in terms of geological time but low in terms of historical time (but not, as the 1905 event shows, nonzero). It is the irresponsibility (in light of new SCIENTIFIC EVIDENCE) of believing that we can retain the principles of "things will continue as before" (when lightning strikes provide scientific evidence that they won't) and "nothing is related to anything else" (which is just FALSE).

You think like a techie and not a scientist.

• ***Follow-Ups:***

- ◆ ***Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks***
◇ From: Eric Chomko
- ◆ ***Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks***
◇ From: Alan Anderson
- ◆ ***IAU to define "planet" before this weekend.***
◇ From: Cardman

• ***References:***

- ◆ ***Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks***
◇ From: spinoza1111
- ◆ ***Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks***
◇ From: Eric Chomko

- Prev by Date: ***Re: Salvaging X-33***
- Next by Date: ***IAU to define "planet" before this weekend.***
- Previous by thread: ***Re: Deep Impact Kicks Off Fourth of July with Deep Space Fireworks***
- Next by thread: ***IAU to define "planet" before this weekend.***
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