

Lighting Sprites in Space

Article

TOP STORIES
1 of 3



Hungary
Illegalizes
Homelessness

Tweet 0 Share Recommend

Rate this Story 0 0

Print Email Order Reprints

Text Size + -

By [ranina sanqlap](#) | November 23, 2011 10:42 AM EST

Lighting Sprites are colorful bursts of electricity that can stretch for more than 95 kilometers (58 miles) from cloud tops. These mysterious and beautiful lightning phenomena had only been captured in photos in 1994 and since then scientists haven't been able to look away from the light show the upper atmosphere provides. Now scientists from Tel Aviv University are proposing that lighting sprites can even be found in outer space.



View Full Image

<http://addins.wrex.com>

Blue Jet TLE

Related Articles

- Egypt Awaits Vote Result; Brotherhood Win Likely
- Gender Inequality Persists in Multitasking: Study
- Multitasking Working Moms Have All the Pressure

Related Topics

Israel

PhD student Daria Dubrovin along with her supervisors Professor Colin Price of TAU's Department of Geophysics and Planetary Sciences and Professor Yoav Yair of the Open University of [Israel](#), and collaborators Professor Ute Ebert and Dr. Sander Nijdam from the Eindhoven Technical University in Holland, believe that Jupiter and Saturn which experiences 1,000 or more times more powerful lightning storms than Earth could also host lighting sprites in their upper atmosphere. To prove her theory, Dubrovin has re-created Jupiter and Saturn's planetary atmosphere in her laboratory.

Sprites are transient luminous events or TLEs that are similar to lightning. They are quite common on Earth but since they only occur in the mesosphere, sprites are hard to observe. Scientists believe that sprites occur when lightning creates an intense electrostatic field above the cloud it originates from. Red sprites occur when ions and electrons are heated by this field. Blue jets on other hand form when a cosmic ray collides with an air molecule in that region.

Like us on Facebook

Like 2k Send

More News

Astronomers are eager to see if other planets have lightning because lightning

• Giant Weta Cricket

INZICHT IN AL UW
UITGAVEN MET HET
FINANCIËEL DAGBOEK

Probeer het nu 1 jaar gratis

DE BANK ANNO NU ABN-AMRO

ADVERTISE WITH US

IBTIMES.TV MORE VIDEOS

NORTH CAROLINA LEGISLATORS MURKING EFFECTS OF NATURAL GAS FRACKING ON WATER

INTERNATIONAL BUSINESS TIMES

Economy
Energy Update: BP Defends Itself Over Spill, N. Carolina Legislators Examine Fracking Effects, ITC To Weigh-In On Chinese Solar Panel Dumping

2:03 0:30 0:30

DJIA: Dow Posts Best Run in Three Years, EU
Logistics Keeps Martin Guitar Humming
Medicine That Can't Wait - That's Logistics