



click here...

Search: All Categories

Home page	News	Science Features	Lab News Pages	E-Card	Laboratory Products
MedLabNews	Media pack	Events	Contact us	Subscribe	Competitions & Giveaways

Date: Monday 09 August 2010



You are here: [Science News](#) - Sign up to receive an email newsletter

Product Categories

- [Biochemistry \[24\]](#)
 - [Biotechnology \[6\]](#)
 - [Chemistry \[34\]](#)
 - [Consumables \[49\]](#)
 - [Engineering \[68\]](#)
 - [Environment \[6\]](#)
 - [Equipment Rental \[1\]](#)
 - [Haematology \[4\]](#)
 - [Health \[10\]](#)
 - [Health & Safety \[35\]](#)
 - [Imaging \[18\]](#)
 - [Lab Design & Storage \[47\]](#)
 - [Lab Services \[29\]](#)
 - [Microbiology \[18\]](#)
 - [Pharma \[13\]](#)
 - [Recruitment \[1\]](#)
 - [Sample Preparation \[42\]](#)
 - [Separation Techniques \[17\]](#)
 - [Software \[43\]](#)
 - [Spectroscopy \[12\]](#)
 - [Test Equipment \[11\]](#)
- OTHER CATEGORIES**
- [Associations \[68\]](#)

Laboratory News Directory is not responsible for the content of external internet sites

Has the IPCC got it wrong over aerosols?

Aerosols help cool the atmosphere by encouraging cloud droplets to form icy particles which reflect sunlight, but new research suggests they could also have the opposite effect and warm the atmosphere too.



Microscopic aerosols cool and heat the atmosphere says new research.

Richard Lindzen, Professor of Meteorology at MIT, and his former postdoctoral researcher Youn-Sang Choi analysed cloud formation and dust aerosol data collected by CALIPSO – NASA’s Cloud Aerosol Lidar and Infrared Pathfinder Satellite Observation satellite – from June 2006 to May 2007.

They discovered that there were 20% fewer super-cooled cloud particles – a

mixture of water and ice that reflect more sunlight than ice alone – in regions that had dust aerosols, which the researcher suggest could warm the atmosphere in those areas.

“Current climate models generally over-predict current warming and assume that the excessive warming is cancelled by aerosols,” Lindzen and Choi said, “Our research offers a potentially important example of where the secondary effect is to warm, thus reducing the ability of aerosols to compensate for excessive warming in current models.”

The researchers believe the decrease in super-cooled particles happens because aerosols travel to a layer of the atmosphere where the temperature is about –20°C and kill super-cooled cloud droplets by causing them to form ice. This means clouds reflect less sunlight, which could have a warming effect on the climate.

“The IPCC assumed that all the secondary effects of aerosols would be to increase reflectivity, so it has left out a very important factor that could lead to the opposite effect,” Lindzen said.

The IPCC – the Intergovernmental Panel on Climate Change – will review the research as part of the peer-reviewed work in preparation for the Fifth Assessment Report about climate change due in 2013.

Aerosols can be both natural – microscopic particles like dust blown from desert winds as studied in this research – and anthropogenic activity, like liquid droplets from fuel combustion.

[Printer Friendly version](#)

Rss Feed

Lab

click here

Detection

eppendorf

SciLabware
AZUL® MBL® PYREX® QUICKFIT®

FREE CARE & MAINTENANCE OF GLASSWARE A1 WALL CHART
www.sclabware.com

SANYO



CO2 Incubator
With a Hydrogen Peroxide Decontamination System

[Click>>](#)

Mums in Science



ONLINE AUCTION

Unipath Ltd
t/a Inverness Medical
2 Phase Sale of Laboratory, Packaging and Warehouse Equipment

Peace of mind is a piece of cake



METTLER TOLEDO

New! G100 Incubator CO₂ Analyser

Bright screen Easy to read

Geotech
A subsidiary of LAMORTE

Comment on this article

Labnews.co.uk is your website – so tell us what you think. Just complete the form below, and lets get the debate started!

Name:

Email:

This field is optional and will only be used if we need to contact you. Your email address will not be displayed on the site.

Comment:

Please enter the characters shown in the image below



Submit Comment

See other news items

- ▶ Age-old puzzle cracked
- ▶ Universe's secrets captured on camera
- ▶ Octopus adapt venom to sub zero temperatures
- ▶ To bite or not to bite...
- ▶ A bright new light
- ▶ Glacier retreat exposes weak underbelly of Antarctic
- ▶ Longer is best?
- ▶ Recycled LCDs have applications in biomedicine
- ▶ Scientists find missing piece in sudden cardiac death puzzle
- ▶ Blast-proof curtains reduce impact of bomb explosions
- ▶ New test for food allergies
- ▶ Tea v coffee and rheumatoid arthritis
- ▶ Arsenic – a promising cancer treatment?
- ▶ Astrocytes the star of the brain
- ▶ Mojo – magical name for new dinosaur species
- ▶ Printing revolution reaches big pharma
- ▶ Funding boost for new astrophysics centre
- ▶ Chips to find CAD
- ▶ Science set to suffer in post-election budgets
- ▶ Alzheimer's - Down syndrome link found
- ▶ Superbug silver bullet discovered
- ▶ Dieting leaves a bitter taste no more
- ▶ A labelling revolution
- ▶ Circular molecule splits bacteria
- ▶ Clever dressing detects infection
- ▶ On the road to cleaner air
- ▶ Robot for rubbish collection
- ▶ Reducing drag with shark model
- ▶ Butterfly wings inspires fraud prevention
- ▶ Life on Mars?
- ▶ Nanofibres spun like candyfloss
- ▶ Clever larvae switch off protection mechanism
- ▶ Tamiflu resistance mechanism revealed
- ▶ Carbon dioxide storage solution



Go Green with Laboratory News

M MILLIPORE

Milli-Q® Integral
Let Your Work Flow™

- ▶ [Plastic fantastic antibodies](#)
 - ▶ [UTCs open in London and Manchester](#)
 - ▶ [Anti-reflection taken to nano levels](#)
 - ▶ [The key to success](#)
 - ▶ [Frog genome to provide clues to development](#)
 - ▶ [Cool cat promises energy revolution](#)
 - ▶ [Spot the difference](#)
 - ▶ [Tattoos to help diabetics monitor blood sugar](#)
 - ▶ [Counting spots](#)
 - ▶ [Micronail chip to aid cell communication](#)
 - ▶ [Killer cell secret key to immunological puzzle](#)
-
- ▶ [Visit the Laboratory News archive](#)
 - ▶ [Visit the Laboratory Science and Research Features archive](#)
 - ▶ [Visit the Laboratory Products, Equipment and Supplies archive](#)