

Earth's magnetic field weakens 10 pc

AP, San Francisco

The strength of the Earth's magnetic field has decreased 10 percent over the past 150 years, raising the remote possibility that it may collapse and later reverse, flipping the planet's poles for the first time in nearly a million years, scientists said Thursday.

At that rate of decline, the field could vanish altogether in 1,500 to 2,000 years, said Jeremy Bloxham of Harvard University.

Hundreds of years could pass before a flip-flopped field returned to where it was 780,000 years ago. But scientists at a meeting of the American Geophysical Union cautioned that scenario is an unlikely one.

"The chances are it will not," Bloxham said. "Reversals are a rare event."

Instead, the weakening, measured since 1845, could represent little more than an "excursion," or lull, which can last for hundreds of years, said John Tarduno of the University of Rochester.

Such a lull could still have significant effects, especially in regions where the weakening is most pronounced.

Over the southern Atlantic Ocean, a continued weakening of the magnetic field has diminished the shielding effect it has locally in protecting the Earth from the natural radiation that bombards our planet from space, scientists said.

As a result, satellites in low-Earth orbit are left vulnerable to that radiation as they pass over the region, known as the South Atlantic anomaly.

Among the satellites that have fallen prey to the harmful effects was a Danish satellite designed, ironically, to measure the Earth's magnetic field, Bloxham said.

The weakening, if coupled with a subsequently large influx of radiation in the form of protons streaming from the sun, can also affect the chemistry of the atmosphere, said Charles Jackman of NASA's Goddard Space Flight Center.

That can lead to significant but temporary losses of atmospheric ozone, he said.

Oldest fossil marsupial found in China

REUTERS, Washington

A 125 million-year-old fossil found in northeast China is probably the oldest known ancestor of modern marsupials, US and Chinese researchers said on Thursday.

The furry mouse-sized creature, named *Sinodelphys szalayi*, would have climbed trees, they report in this week's issue of the journal *Science*.

The fossil is 50 million years older than the oldest known marsupial fossil to date and the finding sheds light on when marsupials diverged from placental mammals -- which include humans, cats and dogs.

Marsupials -- the group that includes opossums, kangaroos and koalas -- give birth to very tiny young that develop in a pouch. Placental mammals give birth later, protecting their young inside the womb.

There are also differences in bone structure, reports Zhe-Xi Luo of the Chinese Academy of Geological Sciences and colleagues there and at the Carnegie Museum of Natural History in Pittsburgh.



Students of the London Grace School in Dhaka perform at its annual cultural programme. The two-day programme that ended yesterday highlighted the historic language movement and the War of Liberation through songs, dance and recitation.

French parliament backs human cloning ban

REUTERS, Paris

France's lower house of parliament backed draft legislation Thursday making reproductive cloning of human cells a crime against humanity punishable by 30 years in jail and a 7.5 million euro (\$9 million) fine.

The draft law would also ban cloning for therapeutic purposes -- the creation of stem cells for medical research -- and key techniques used in embryo research.

Final legislation will be adopted early next year assuming it is also passed by the upper house -- which like the lower house is dominated by President Jacques Chirac's

ruling conservatives -- in a vote scheduled for February.

"This text is a sop to conservatives and is a step backwards compared to the first version," left-wing deputy Jacqueline Fraysse said, referring to an initial draft penned under the Socialist-led government which was ousted last year.

France has been one of the countries most opposed to cloning

technologies. Chirac said this year he wanted to lead efforts for an international convention on bioethics to prevent abuse of cloning research.

The U.N. General Assembly decided Tuesday to postpone for a year deliberations on a treaty banning human cloning that President Bush's administration wants to extend to research on stem cells.

A spoonful of cinnamon helps treat diabetes

REUTERS, New York

People with diabetes can help keep their bodies healthy by simply adding a dash of spice to their diet, new research reports.

In a study, diabetics who incorporated one gram -- equivalent to less than one-quarter teaspoon -- of cinnamon per day for 40 days into their normal diets experienced a decrease in levels of blood sugar, cholesterol and blood fats.

And for people with diabetes, the less of those substances in the body, the better.

Type 2 diabetes arises when the body loses sensitivity to insulin, a hormone that shuttles the sugars from food into body cells to be used for energy. As a result, the amount of sugar, or glucose, in the blood remains high, leading to fatigue and blurred vision. Over the long term, excess blood glucose can increase the risk of heart disease, kidney failure and blindness.

The current findings suggest that a small amount of cinnamon can help protect diabetics from these and other potential complications of their condition, study author Dr Richard A. Anderson of the Beltsville Human Nutrition Research Center in Maryland told Reuters Health.

Diabetics could add a dash of cinnamon to their morning servings of coffee, orange juice or cereal, Anderson noted. "You can also make a cinnamon tea by simply boiling water with stick cinnamon," he suggested.

Anderson noted that cinnamon may also help stave off the onset of type 2 diabetes in people at risk of the condition.

He added that cinnamon contains some substances that can be toxic in high amounts, so people should be sure not to get too much of a good thing. "Certainly, a gram per day is not a high amount," he reassured.

During the study, Anderson and his colleagues asked 60 people with type 2 diabetes to consume 1, 3, or 6 grams of cinnamon each day for 40 days, or the equivalent amount of wheat flour, as a placebo. Both the cinnamon and wheat flour were administered in capsule form.

Reporting in the journal *Diabetes Care*, Anderson and his team found that all cinnamon-takers experienced a drop in blood levels of glucose, fats and cholesterol by up to 30 percent. No change was seen in the people taking placebo capsules.

Anderson explained that cinnamon contains compounds that help make insulin more efficient, improving the hormone's ability to bring glucose to the cells that need it.

As an added bonus, cinnamon contains virtually no calories, Anderson said, allowing diabetics to add zest to their meals without adding to their waistlines.



A three-day camp for free treatment of cleft lip patients was inaugurated at the Ma O Shishu Hospital at Agrabad in Chittagong on Wednesday. The Starship Full Cream Milk Powder, Rotary Club of Agrabad and the Ma O Shishu Hospital jointly organised the free medical camp.