The Coming Ice Age And The Expanding Planet

Ronald Kitching
The Coming Ice Age
In his great book, titled *A Short History of Planet Earth*, Dr. Ian Plimer shows us that the immediate danger to the earth and its population is not the warming of the greenhouse effect, but the coming of the next ice age.
This is not to say that industrial pollution is not a serious matter. It is particularly in China.

Right now, coal makes up about 65% of China's primary energy consumption, for both electricity production and as boiler fuel in factories and space heating in housing stock.

China is both the largest consumer and producer of coal in the world. China's coal consumption in 2003 was more than 1.53 billion short tons, or 28% of the world total.
According to The New York Times, China today burns more coal than the combined consumption of the United States, the European Union, and Japan. China has increased its coal consumption by about 14% in each of the past two years, and will continue to do so. Every 7 to 10 days, another coal-fired power plant begins to operate somewhere in China, with generating capacity sufficient to serve all of the households in a city the size of Tampa or Seattle.
Satellite photos show enormous clouds of pollution even reaching North American shore. No wonder they plan to build forty nuclear energy plants.
Apart from regular cycles which have brought the ice age to the planet periodically, an ice age can be triggered by natural causes like meteor or asteroid strikes which have also plagued the planet. Large exploding volcanoes which can convert more than 2,000 cu Km to as much as 45,000 cu Km of rock or more into dust, which can blot out the sun for extended periods, giving rise to famine and pestilence.
In a book titled, *Not by Fire But By Ice*, Robert W. Felix shows us that the fifth recurring ice age of the last 500,000 years is now overdue.

Pacemaker of the ice ages. Changes in global ice volume during the last 500,000 years, as determined from CLIMAP isotopic measurements. (Chart is from John and Katherine Imbrie’s book *Ice Ages, Solving the Mystery*, by permission of Enslow Publishers. Data from J.D. Hays *et al.*, 1976, by permission J.D. Hays)
* The next beat of the 179 year solar retrograde cycle is due.

* The next beat of the 360 Little Ice Age cycle is due.

* The next beat of the 1,440 year ice age cycle is due.

* The next beat of the 11,500 year ice age cycle is due.

* The next beat of the 100,000 year ice age cycle is due .... and we are conditioned into worrying about global warming???
When an ice age occurs much of the water on the planet turns to ice.

For instance, the Tasmanian Hydro schemes will be useless, as the water that normally drives them, will all be solid ice. So will the Snowy Mountains stored water supplies.
The sensible thing to be doing is not just planning, but building large nuclear power stations *now*, to produce potable water from sea water. And apart from that, to provide us with adequate power to keep us warm.
Those unprepared for the planet's coming ice age, which, once started, descends very quickly, and will freeze humans by the hundreds of millions, perhaps billions.

Consider this, where there is little or no sunlight:

* Plants do not grow

* Grass does not grow

* Trees do not grow

* Nothing grows.

* In the seas, plankton does not propagate and hence many fish and other ocean going inhabitants do not survive.
But adequate planning and preparation can soften the blows of an ice age, which can arrive at any time from now until the next 130 years or so. But the long term issue is the expanding planet.
If you want to know more ask Google for **The New Ice Age** and, in 0.21 of a second you will receive 93,300,000 essays on the subject.

You can take refuge in the thought that some authors do not expect the next ice age for 15,000 years.
The Expanding Planet
For those of you who are really interested in the future of the planet, you may be astonished to discover that this planet is, in fact, slowly expanding and has been, since it first swung into orbit around the then relatively new sun, about four and a half billion years ago.

This fact, that the planet is expanding, in itself disposes the planet to climate change, without other natural cyclical factors, which are many.
Interested people can learn all about it for themselves by reading *Earth Universe Cosmos, by the late Prof. S. Warren Carey.*

Dr Carey was Professor of Geology at the University of Tasmania in Hobart.

Such was his prolific scholarship, he earned more awards and honours, nationally and internationally, than one can reliably count.
Or simply ask Google for *The Expanding Earth* and Google supplies 31,000,000 essays on the subject.
Most people are so busy running their businesses, doing their jobs, attending to the needs of their children that they don't have time for extra curricula activities.

I feel that one of the most interesting and important activities, is learning from whence this planet came, and for how long it is likely to remain liveable for the human race in its orbit around the sun.
Scientists generally agreed that the sun is about six billion years old and half way through its 10 to 12 billion year life cycle. Earth is about 4 to 4.6 billion years of age and also about halfway through its life cycle. But the human race appears to have evolved only about 1 to 2 million years ago, although science may yet discover, that we are much older than we now think. So we have only been here for a relatively short time.
The interesting thing is, is that the planet was not always the size it now is. Nor did the planet always enjoy its present equipoise. Plimer tells us that 99.5% of all of the species that have inhabited the planet are already extinct.

But curiously, after the last great mass extinctions, 65 million and 55 million years ago, the equitable conditions on earth have given rise to a wonderful episode of the explosion of more species than ever, including our own, on the planet, in spite of recurring asteroid strikes and devastating ice ages.
This planet contains an extraordinary amount of the heavy metals.

Led by Sir Fred Hoyle's discoveries in 1957, science in general agrees that it takes a supernova, that is, a very large exploding sun to generate the heavy metals.

The metals iron and heavier, (of which there are many), are the heavy metals.

A list of such metals appears at the end of this paper.

And such exploding suns that produce them, need to be at least eight to ten times bigger than our sun, to generate the energy it takes to produce the heavy metals.

http://www.answers.com/topic/fred-hoyle

http://education.guardian.co.uk/higher/physicalscience/story/0,9836,541270,00.html
### About this Object

**Object Name:** NGC 6751  
**Object Description:** Planetary Nebula in the Milky Way Galaxy  
**Position (J2000):**  
- R.A. 19h 05m 58s  
- Dec. -05° 59’ 20’’  
**Constellation:** Aquila  
**Distance:** The distance to NGC 6751 is 6500 light-years (~2 kpc).  
**Dimensions:** The diameter of the nebula is 24 arcseconds (about 0.8 light-years).

### About the Data

**Instrument:** WFPC2  
**Exposure Date:** April 21, 1998  
**Exposure Time:** 30 minutes  
**Filters:** F502N ([O III]), F555W (V), F658N ([N II])  
**Colors:** Composite  
**Principal Astronomers:**  
- A. Hajian (US Naval Observatory),  
- B. Balick (University of Washington),  
- H. Bond and N. Panagia (STScI),  
- Y. Terzian (Cornell University).

### About this Image

**Image Credit:** NASA and The Hubble Heritage Team (STScI/AURA)  
**Release Date:** April 6, 2000 1:00 a.m. (EDT)  
**Orientation/Scale:** North is to the lower right, East is to the upper right of the image.
**About this Object**

**Object Name:** NGC 6369, The "Little Ghost" Nebula  
**Object Description:** Planetary Nebula  
**Position (J2000):**  
R.A. 17h 29m 20.40s  
Decl. -23° 45' 37.9"  
**Constellation:** Ophiuchus  
**Distance:** 2,000 - 5,000 light-years (600 - 1,500 parsecs)  
**Dimensions:** This image is 2.4 arcminutes across. At a distance of 3,500 light-years, this width corresponds to 2.5 light-years (0.75 parsecs).

**About the Data**

**Instrument:** WFPC2  
**Exposure Dates:** February 27, 2002  
**Exposure Time:** 51 minutes  
**Filters:** F439W (B), F502N ([O III]), F555W (V), F656N (H-alpha), F656N ([N II]), F814W (I)  
**Principal Investigators:** Hubble Heritage Team: K. Noll, H. Bond, C. Christian, L. Frattare, F. Hamilton, J. Lee, Z. Levay, E. Masiero, P. Royle (STScI), and T. Borders (Sonoma State, CA)

**About this Image**

**Image Credit:** NASA and The Hubble Heritage Team (STScI/AURA)  
**Release Date:** November 7, 2002  
**Orientation/Scale:** NGC 6369

HST • WFPC2

0.3 parsec  
1 light-year
### About this Object

**Object Name:** IC 418 • The “Spirograph” Nebula  
**Object Description:** Planetary Nebula in the Milky Way Galaxy  
**Position (J2000):**  
R.A. 05h 27m 28.s 6
Dec. -12° 41' 50"  
**Constellation:** Lepus  
**Distance:** About 2000 light-years  
**Dimensions:** The nebula is about 0.2 light-years or 13,000 AU (18 arcseconds) in diameter.

### About the Data

**Instrument:** WFPC2  
**Exposure Dates:** February 1999 (F656N - Sahai), September 1999 (F502N, F658N - Hajan)  
**Exposure Time:** 35 minutes  
**Filters:**  
Red: F658N [N II]  
Green: F656N Ha  
Blue: F502N [O III]  
**Principal:** R. Sahai and J. Trauger (JPL)  
**Astronomers:** A. Hajian (USNO), Y. Terzian (Cornell), B. Balick (Univ. Washington), H. Bond and N. Panagia (STScI)

### About this Image

**Image Credit:** NASA and The Hubble Heritage Team (STScI/AURA)  
**Release Date:** September 7, 2000 1:00 a.m. EDT  
**Colors:** Composite, chromatic  
**Orientation/Scale:**
About this Object

Object Name: Messier 57 • M57 • The Ring Nebula • NGC 6720

Position (J2000): R.A. 18h 53m 35s  
Dec. 33° 01' 43"

Constellation: Lyra

Total Visual: 9.7 (Sky Catalogue 2000); Central star: 15.8 Vmag

Magnitude:

Distance: 0.7 kpc = 2300 light-years

Scale of Image: The image is 2 arcminutes (roughly 1.3 light-years) on the vertical side.

About the Data

Instrument: WFPC2

Exposure Date: October 16, 1998

Total Exposure: 1 hour

Time:

Filters: Red: F658N ([N II]), Green: F501N ([O III]), Blue: F469N (He I)


Astronomers: Kinney, Z. Levay, K. Noll (The Hubble Heritage Team, STScI)

About this Image

Image Credit: NASA and The Hubble Heritage Team (STScI/AURA)

Release Date: January 6, 1999 10:00am EST

Orientation/Scale: North is approximately 30° CW from up; east is to the left
**About this Object**

- **Object Name:** NGC 3132 • "The Eight-Burst Nebula" • "Southern Ring Nebula"
- **Object:** Planetary Nebula
- **Description:**
  - **Position (J2000):** RA 10h 06m 58.s4s
  - **Dec.** -40° 26' 00"
- **Constellation:** Vela
- **Total Visual:** ~ 8
- **Magnitude:**
- **Distance:** 2000 light-years (500 pc)
- **Diameter of Object:** NGC 3132 is ~ 0.4 light years in diameter.
- **Object Dimensions:** The image is 1.2 arcminutes on the vertical side.

**About the Data**

- **Instrument:** WFPC2
- **Exposure Date:** December 7, 1995
- **Exposure Time:** 1 hour
- **Filters:** Red: F658N (NII), Green: F656N (H-alpha), Blue: F502N (OIII)
- **Colors:** Chromatically ordered (see caption)
- **Principal Investigators:** R. Sahai, J. Trauger & R. Evans (Jet Propulsion Lab), and the Hubble Heritage Team
- **Astronomers:** WFPC2 Investigation Definition Team (IDT)

**About this Image**

- **Image Credit:** NASA and The Hubble Heritage Team (STScI/AURA)
- **Release Date:** November 5, 1998 12:00pm EDT
- **Orientation/Scale:** North is to the bottom left hand corner of the image.
**About this Object**

**Object Name:** Cat's Eye Nebula, NGC 6543  
**Object Description:** Planetary Nebula  
**Position (J2000):**  
- R.A. 17h 58m 33s.42  
- Dec. +66° 37' 59.5"  
**Constellation:** Draco  
**Distance:** 3,000 light-years (1,000 parsecs)  
**Dimensions:** This image is 1.2 arcminutes (1.2 light-years or 0.35 parsecs) wide

**About the Data**  
**Data Description:** This image was created from HST observations from the following proposal: 9026: Z. Tsvetanov (JHU)  
**Instrument:** ACS/WFC  
**Exposure Date:** May 4, 2002  
**Exposure Time:** 1.2 hours  
**Filters:** F502N [O III], FR505N [O III] and F658N (Halpha+[N II])

**About this Image**  
**Image Credit:** NASA, ESA, HEIC, and The Hubble Heritage Team (STScI/AURA)  
**Release Date:** September 9, 2004  
**Orientation/Scale:**  
- NGC 6543  
- Cat's Eye Nebula  
- HST ACS/WFC  
- 0.5 light-years  
- 0.15 parsecs
I have read that some scientists have estimated that there is so much heavy metal in our planet that it has gone through the Supernova process at least three times.

Prof Carey speculates that the earth is expanding thus:
Since Palaeozoic times, (400 million years ago), the earth has almost doubled its size.

If the rate of expansion is maintained, accelerating expansion will overtake cohesion, resulting in explosive disruption in 200 million years.

But Carey shows that this planet is rapidly increasing in diameter. He expects that it will suffer a similar fate to the late planet Astex, which was situated between Mars and Jupiter. That planet is now an asteroid belt. Carey’s personal view is that earth will disintegrate into a mass of asteroids in as little as one hundred million years.
Various scientists, including NASA have measured the present rate of increase of the radius to be 2.08 cm per year (plus or minus 0.8 cm).

To quote Carey, this expansion rate is the same as that found by Jan Koziar (1991), from a variety of methods, and also nicely accounts for all of the new ocean floor since the mid Cretaceous. (Say 100 million years ago); for comparison, the new ocean floor around the equator adds up to 18,300 km, which is in the middle of the probability range.
But the rate of increase is becoming exponential as we view Carey’s illustration:
Figure 129—Speculation on the fate of the solar system.
If you are planning to still be here in 100 million years, I would encourage you to insure against the disaster with Senor Don Pedro del Presidente.

But the immediate problem for the human race is the approaching ice age. It will be preceded by natural heating which, mainly comes from undersea volcanic action, which warms the oceans, as the planet expands.

Web site on The Expanding Earth:

http://www.expanding-earth.org/

Also an interesting Web site :

http://www.panspermia.org/chandra.htm
# The Heavy Metals

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<th>Metal</th>
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Questions
How big are we?
Thankyou