Combating Climate Change with Neutrinos

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Abstract

In this note we propose a simple method of decreasing Global Warming by increasing the ^{15}N of the atmosphere based on experimental and theoretical evidence.

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Keywords: ^{15}N, Neutrinos, Climate Change

1   Introduction

Cirrus ice clouds have often been observed evaporating when the sun goes down and less solar neutrinos are available.To confirm this Fig.2 shows a temperature drop of up to 4 degrees C over 5 days and nights in a cylinder of ^{15}N at room temperature and 1 bar which could only have been caused by out of phase neutrinos collapsing an excited energy level to the ground state; because only neutrinos can pass right through the Earth to produce a big temperature drop at midnight and the Atmosphere contains 0.366 per cent of ^{15}N

Specifically the 10.804 MeV level of ^{15}N(which is the ground state of $^{14}N + n$) decays to its ground state in a fraction of a psec after emitting a γ particle [1]. There are also energy levels of about 9.15 MeV associated with a γ ray generated by $^{14}C + p$ that rapidly decay to the ground state.These levels correspond to a frequency $E/h \approx 1.5.10^{23}Hz$. In support of these observations Fig.1 shows an ultra-high frequency calculated in the wave-function of ^{15}N [2]that would collapse when out of phase with low frequency neutrinos causing the temperature drop of Fig.2.

An experiment analogous to ice-clouds has recently been done by the Argonne Physics Division which made use of the ATLAS detector at CERN to produce ^{15}C beam (half-life 0.75 sec)by bombarding a cryogenic deuterium target with a ^{14}C beam which would then decay to ^{15}N [3].

2 ^{15}N and Climate Change

At present the atmosphere contains only about 0.366 per cent of ^{15}N so cooling by neutrinos is low. But it is possible that during Ice Ages there was more ^{15}N and ,of course, Sun-Spots would generate more solar neutrinos. Then when CO_2 concentrations rose due to human activities the ratio $^{15}N/^{14}N$ fell.

However ^{14}N is readily extracted from the atmosphere to make fertilizer and neutron beams are also common so it should be possible to generate ^{15}N from $^{14}N + n$ in the vicinity of Power Plants. A possible alternative would be to utilize a proton beam in a smokestack to produce $^{14}C + p =^{15} N$ that at the same time would reduce carbon emission.However as there are about 10^{12} atoms of ^{12}C to one atom of ^{14}C, the latter is extremely rare so an acceptable alternative would be to simply add Deuterium to a suitable Flue Scrubber and thus obtain ^{14}C which is harmless.

References

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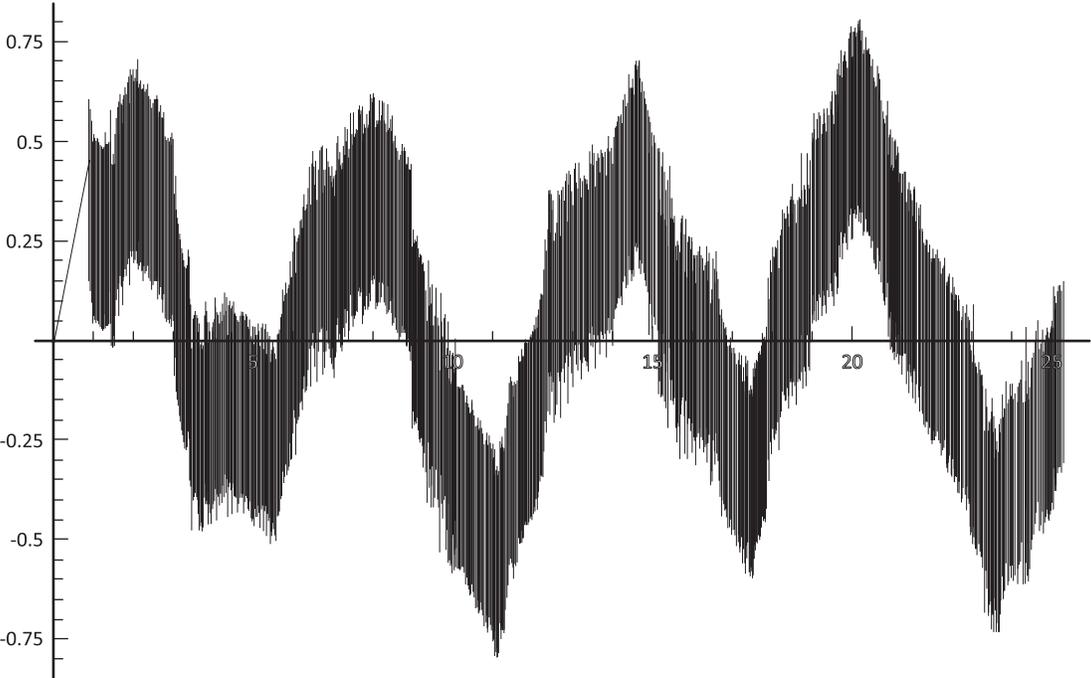
Fig. 1

Figure 1: Wave function of ^{15}N

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Sat, 6/5/2010   Sun, 6/6/2010   Mon, 6/7/2010   Tue, 6/8/2010   Wed, 6/9/2010   Thu, 6/10/2010   Fri, 6/11/2010
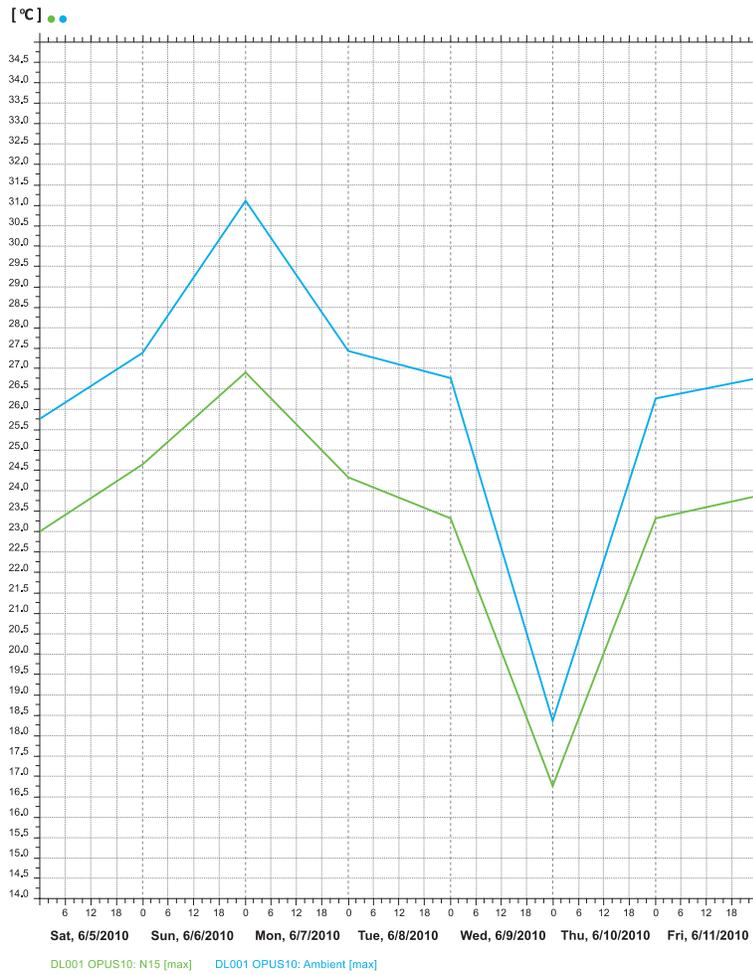
DL001 OPUS10: N15 [max]   DL001 OPUS10: Ambient [max]

Fig. 2

Figure 2: Cooling of ^{15}N by neutrinos