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A Cold Spell Soon To Replace Global Warming

By Oleg Sorokhtin

MOSCOW: Stock up on fur coats and felt boots! This is my paradoxical advice to the warm world.

Earth is now at the peak of one of its passing warm spells. It started in the 17th century when there was no industrial influence on the climate to speak of and no such thing as the hothouse effect. The current warming is evidently a natural process and utterly independent of hothouse gases.

The real reasons for climate changes are uneven solar radiation, terrestrial precession (that is, axis gyration), instability of oceanic currents, regular salinity fluctuations of the Arctic Ocean surface waters, etc. There is another, principal reason—solar activity and luminosity. The greater they are the warmer is our climate.

Astrophysics knows two solar activity cycles, of 11 and 200 years. Both are caused by changes in the radius and area of the irradiating solar surface. The latest data, obtained by Habibullah Abdusamatov, head of the Pulkovo Observatory space research laboratory, say that Earth has passed the peak of its warmer period, and a fairly cold spell will set in quite soon, by 2012. Real cold will come when solar activity reaches its minimum, by 2041, and will last for 50-60 years or even longer.

This is my point, which environmentalists hotly dispute as they cling to the hothouse theory. As we know, hothouse gases, in particular, nitrogen peroxide, warm up the atmosphere by keeping heat close to the ground. Advanced in the late 19th century by Svante A. Arrhenius, a Swedish physical chemist and Nobel Prize winner, this theory is taken for granted to this day and has not undergone any serious check.

It determines decisions and instruments of major international organizations—in particular, the Kyoto Protocol to the United Nations Framework Convention on Climate Change. Signed by 150 countries, it exemplifies the impact of scientific delusion on big politics and economics. The authors and enthusiasts of the Kyoto Protocol based their assumptions on an erroneous idea. As a result, developed countries waste huge amounts of money to fight industrial pollution of the atmosphere. What if it is a Don Quixote's duel with the windmill?

Hothouse gases may not be to blame for global warming. At any rate, there is no scientific evidence to their guilt. The classic hothouse effect scenario is too simple to be true. As things really are, much more sophisticated processes are on in the atmosphere, especially in its dense layer. For instance, heat is not so much radiated in space as carried by air currents—an entirely different mechanism, which cannot cause global warming.

The temperature of the troposphere, the lowest and densest portion of the atmosphere, does not depend on the concentration of greenhouse gas emissions—a point proved theoretically and empirically. True, probes of Antarctic ice shield, taken with bore specimens in the vicinity of the Russian research station Vostok, show that there are close links between atmospheric concentration of carbon dioxide and temperature changes. Here, however, we cannot be quite sure which is the cause and which the effect.

Temperature fluctuations always run somewhat ahead of carbon dioxide concentration changes. This means that warming is primary. The ocean is the greatest carbon dioxide depository, with concentrations 60-90 times

larger than in the atmosphere. When the ocean's surface warms up, it produces the "champagne effect." Compare a foamy spurt out of a warm bottle with wine pouring smoothly when served properly cold.

Likewise, warm ocean water exudes greater amounts of carbonic acid, which evaporates to add to industrial pollution—a factor we cannot deny. However, man-caused pollution is negligible here. If industrial pollution with carbon dioxide keeps at its present-day 5-7 billion metric tons a year, it will not change global temperatures up to the year 2100. The change will be too small for humans to feel even if the concentration of greenhouse gas emissions doubles.

Carbon dioxide cannot be bad for the climate. On the contrary, it is food for plants, and so is beneficial to life on Earth. Bearing out this point was the Green Revolution—the phenomenal global increase in farm yields in the mid-20th century. Numerous experiments also prove a direct proportion between harvest and carbon dioxide concentration in the air.

Carbon dioxide has quite a different pernicious influence—not on the climate but on synoptic activity. It absorbs infrared radiation. When tropospheric air is warm enough for complete absorption, radiation energy passes into gas fluctuations. Gas expands and dissolves to send warm air up to the stratosphere, where it clashes with cold currents coming down. With no noticeable temperature changes, synoptic activity skyrockets to whip up cyclones and anticyclones. Hence we get hurricanes, storms, tornados and other natural disasters, whose intensity largely depends on carbon dioxide concentration. In this sense, reducing its concentration in the air will have a positive effect.

Carbon dioxide is not to blame for global climate change. Solar activity is many times more powerful than the energy produced by the whole of humankind. Man's influence on nature is a drop in the ocean.

Earth is unlikely to ever face a temperature disaster. Of all the planets in the solar system, only Earth has an atmosphere beneficial to life. There are many factors that account for development of life on Earth: Sun is a calm star, Earth is located an optimum distance from it, it has the Moon as a massive satellite, and many others. Earth owes its friendly climate also to dynamic feedback between biotic and atmospheric evolution.

The principal among those diverse links is Earth's reflective power, which regulates its temperature. A warm period, as the present, increases oceanic evaporation to produce a great amount of clouds, which filter solar radiation and so bring heat down. Things take the contrary turn in a cold period.

What can't be cured must be endured. It is wise to accept the natural course of things. We have no reason to panic about allegations that ice in the Arctic Ocean is thawing rapidly and will soon vanish altogether. As it really is, scientists say the Arctic and Antarctic ice shields are growing. Physical and mathematical calculations predict a new Ice Age. It will come in 100,000 years, at the earliest, and will be much worse than the previous. Europe will be ice-bound, with glaciers reaching south of Moscow.

Meanwhile, Europeans can rest assured. The Gulf Stream will change its course only if some evil magic robs it of power to reach the north—but Mother Nature is unlikely to do that.

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