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Cover: With temperatures rising in many regions of the world, scientists are trying to determine whether greenhouse gas pollution or natural forces deserve the blame. (Color-enhanced photo from Design Imaging)



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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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## Letters

### Ozone destruction onus on us

Thomas A. Dobbins' letter (SN: 3/25/95, p.179) contains the kind of faulty "reasoning" that will allow us to destroy ourselves with our own pollution.

Hydrogen fluoride has no natural source in the stratosphere, the layer of atmosphere above the troposphere (where we live). When volcanoes emit hydrogen fluoride, it very rarely reaches the stratosphere, because hydrogen fluoride is easily and quickly rained out of the troposphere.

The hydrogen fluoride that is present (and steadily increasing) in the stratosphere can only come from man-made chemicals (primarily CFCs). These are not water-soluble, are not rained out, and rise into the upper layers of the atmosphere to be broken down, yielding hydrogen fluoride, other telltale intermediates containing fluorine, and chlorine compounds.

The scientific evidence linking CFCs to ozone destruction is based on many lines of research and is overwhelming.

*Deana M. Crumbling  
Wayne, Pa.*

### Unaccountable practices

Dolan's team states that "a sequence [of Northridge-size earthquakes] would certainly strain the ability of the region (and the nation) to absorb the resultant losses" ("Los Angeles faces a dangerous quake debt," SN: 1/21/95, p.37).

In anticipation of a costly event or series of events, the prudent thing would be to put some money aside. Present accounting practices make that impossible.

If an insurance company writes insurance against earthquakes and there is no quake by the end of the policy period, the premium becomes part of profits. Taxes are paid and dividends are distributed.

At any one time, for any one earthquake, the company has only one year's premium

in its coffers. If there is a loss, the premium will be inadequate to cover it and the insurer will have to pay the remainder out of its capital. To the insurer, writing any substantial amount of earthquake coverage means betting the farm.

In other lines of insurance (liability, workers compensation, life), companies are required to reserve a portion of the premium in anticipation of inevitable losses or the most likely level of losses. If this were true of property insurance where there is a catastrophe potential (earthquakes, hurricanes), it would provide a mechanism whereby the nation could create a pool of money to "absorb the resultant losses."

As insurance companies receive investment income from money held to pay future losses, it also would make these lines of insurance more attractive. Availability would be improved and premiums would be lower.

*Charles A. McAlear  
New Orleans, La.*

JUNE 10, 1995

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