

LETTERS

Dear Sir

The last two summers were the driest in south east England for several years: the number and volume of insurance claims resulting from 1990 is not yet known, but the 1989 summer led to the highest claims on record for the repair of damage caused by shrinkage settlement. It is no coincidence that much of south east England, including London, is underlain by clay strata which dry out and shrink in dry weather.

As always the average susceptible punter was caught napping, as were the insurance companies who had to pay for the damage and the consultants and contractors who benefitted from the design and implementation of remedial measures: every cloud has a silver lining - but not necessarily for the same person. When will the building industry have its next shrinkage windfall at the expense of the insurance companies? How long will insurance companies be able to afford to insure against shrinkage at a 'reasonable' premium? These questions need not be as imponderable as one may think.

According to many climate researchers, whenever the world warms up, south east England becomes drier. Therefore, the clays there dry out and shrinkage occurs in years when the global temperature is above average. So all we need to know is when the world will warm up next and we'll know when the insurance companies will provide our next shrinkage bonanza.

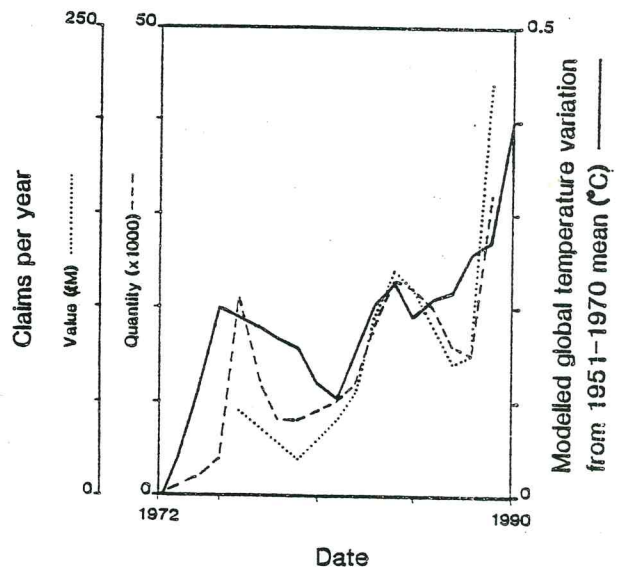
That's where the deterministic climate model comes in. Developed in 1980, it 'knows' what global temperature will do next by combining the greenhouse effect with natural variations. If you think the comparison of the model with insurance claims since 1980 in the figure is close enough to warrant finding out more about its forecasts for the future do contact the writer for further information. You'd be amazed what is going to happen next.

Yours faithfully,

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Insurance v Climate



LETTERS

Water level

You summarised the conclusions of Dickinson and Cicerone (*Nature*, vol 319, p 109) that the overall greenhouse effect of anthropogenic trace gases will cause the world to warm up by about 3° C by 2050 AD (*Science*, 16 January, p 25). At the end of the last ice age, the global temperature rose by about 6° C. This was closely associated with a corresponding sea-level rise of about 100 metres at a rate of about 5 centimetres per year as landlocked ice melted.

By analogy this would appear to suggest that we are heading rapidly towards a near-future potential sea-level rise of 50 metres. Even at the slow rate at the end of the last ice age, which presumably reflected a time lag caused by the absorption of latent heat in transfer of state from ice to water, some three metres of this could occur by 2050. This would flood huge tracts of land and devastate many great cities including London with its new Thames barrier. Increasing population and industrialisation will further aggravate the situation.

Or is there something wrong with the theory? In which case—as recently questioned in *Nature* (vol 318, p 596)—why are we paying for it?

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