

No enemy but winter and rough weather

Television Review by Allan Piper

ON Wednesday evening, immediately following *The Frost Interview*, the BBC broadcast its much heralded, prestige extravaganza *The Weather Machine* (BBC2, November 20, 9.00 p.m.); the latest in a series of annual productions which began so successfully back in 1970 with *Violent Universe*. Excellently assisted by the studio commentary of Magnus Magnusson, the modulated narrative tones of Eric Porter and, more importantly, by the availability of a six figure budget, producer Alec Nisbett endeavoured to squeeze into 120 minutes of airspace the fruits of twelve months globetrotting.

The programme followed much the same format as its predecessors, with periods of studio commentary (which saw Magnusson perched uncomfortably atop a large model world looking as though he might indulge in some involuntary globetrotting himself) followed by long snippets of film. All in all, very similar to the university lectures I remember. The similarity was probably intentional and, considering the objectives of the programme, was a good idea.

The Weather Machine, like its predecessors, was scripted by Nigel Calder. But even though his undeniable competence always shone through (he was winner of the UNESCO prize for the popularisation of science in 1972) my sense of enlightenment was somewhat tempered by the banjaxed mood in which I found myself once it was all over. The production set itself too many goals; it is simply not possible for anyone comprehensively to cover so much ground in so short a time. We saw ice sheets in Greenland and tornados in America and buoys in the Pacific and some floods in Japan and a mountain in Hawaii and Magnus Magnusson orbiting Venus.

And out of it all we learned that it is getting colder and that ice sheets can form far more rapidly than was ever before realised. The long hot summer's days of the 1920s are gone for at least a few thousand years. Just around the corner are days like those remembered by Shakespeare, "when milk came frozen home in pail". Regular readers of *Nature* will already be aware of the more tragic consequences of that and the other climatic changes which are already becoming evident.

Given the topicality of the subject and the tremendous opportunity that it offered for some spectacular camera work the production was always just a little disappointing. Technically, of course, it came up to the usual excellent

standard achieved by the BBC but in every other respect it was really rather dull television; those with black and white sets missed very little.

The production team could claim that spectacular entertainment was not their main objective in a programme which set out primarily to inform. That would be a fair argument but it is worth considering whether the programme fulfilled any requirements that had not been met already by other programmes; particularly so in view of the gigantic financial investment. Perhaps it is unfair to compare this production with *Horizon*, but the comparison is inevitable and, I believe, quite valid. Generally speaking, both series deal with the popularisation of serious science; several steps up from the antics of Patrick Moore and the boffinry of Raymond Baxter. And both attempt to keep the public abreast of recent advances in important areas of research.

Three *Horizon* programmes could have covered the same ground more effectively and perhaps more concisely. Quite definitely more cheaply. Hubert Lamb (who, as irrepressible as ever, made a brief appearance) and others like him will doubtless take that last point. How much better could those research workers have used the financial balance.

The Weather Machine had no inherent superiority over its more quotidian counterpart, only an ascribed importance supported by a cover picture in *Radio Times*. Although it was a brave attempt to present a comprehensive summary of the present state of a very wide field of research, perhaps the production should have gone out in two separate screenings. The real weather machine may well be changing gear; but in the present form a programme such as this can never really shift into top.

Book Review by John Gribbin

THIS is not at all a bad book. It covers a wide area, drawing on many disciplines, clearly, with lavish illustrations and at a very reasonable price. Even so, after reading it I was left with a slight feeling of disappointment because *The Weather Machine* does not quite live up to the standards of some of its predecessors (notably *Violent Universe* and *Restless Earth*) and it could have been better.

In spite of this, however, the book could well reach a wider audience than any of its predecessors. Climatic change, whether it 'merely' produces droughts in sub-tropical regions or leads to a full scale ice age, is rapidly becoming recognised as one of the key problems faced by mankind today. Changes in the weather are felt by

everyone, and they concern everyone in a way that advances in astronomical ideas or a better understanding of the causes of earthquakes can never do. Yet, because of the short time which has elapsed since it was realised just how quickly the climate can change, there are very few books which deal with the problem, although library shelves are laden with books on black holes, radio astronomy, earthquakes and continental drift written at all levels from the most popular to the most erudite.

When we turn to climatic change (as distinct from the weather and meteorology) I can think of only two books of broad interest that I would recommend: Hubert Lamb's *Climate: Present, Past and Future* (for the more academic market), and E. Le Roy Ladurie's *Times of Feast, Times of Famine* at a more popular level. Both are expensive, and neither provides a suitable starting point for the general reader who is concerned about what is happening to the weather.

So—partly by default—Nigel Calder's latest book is clearly the best introduction yet available to a concerned reader. As such, it will also prove invaluable to those studying these problems, although they will not all go along with the author in his firm support for the idea that ice ages are caused by the wobble of the Earth in its motion through space (the Milankovitch hypothesis). And no doubt hard core meteorologists will be interested in this concise summary of the longer view.

Perhaps the book could have gone a little further in presenting a balanced view rather than a picture of imminent climatic doom. Too much crying of "wolf" will do no good for the cause of the serious student of climatic change, and could indeed do harm. The reader is advised to take some of the extrapolations with a pinch of salt; but that is my only major criticism of what is, nevertheless, a worthwhile book.

There is still an obvious need for a more 'solid' book, as opposed to the coffee-table variety, to bridge the gap in the market between *The Weather Machine* and Lamb's epic—but until such a book appears this one will do to be going on with. As with most books one can quibble about points of presentation and style, but when the book has no competitors such criticism seems carping. One point, however: I would have liked to see the word 'climate' in the title; this is not really a book about weather, and the sub-title and *The Threat of Ice* gives, almost as a throw-away, a better impression of its theme.

The Weather Machine and The Threat of Ice. By Nigel Calder. Pp. 143. (BBC: London, November 1974.) £3.25.