

- What has been the real impact of past weather extremes (e.g. cold winters, droughts, floods, heatwaves and hurricanes) on historic events?
- Is the frequency and impact of weather extremes changing?
- Can we predict how the climate will behave in the future and what will be the consequences of these changes?
- Are greater, less predictable changes just around the corner?

This book seeks to answer these questions by providing a balanced and accessible analysis of the current debate on climatic change. Combining a historical perspective, economic and political analysis, together with meteorological and climatological explanations of the impact of extreme weather events on all aspects of society, it provides a basis for interpreting what is known about climatic change and the ability to forecast future changes and their economic and political consequences. The book will be of interest to all those concerned with the future of human society.



## Does the Weather Really Matter?



### WILLIAM JAMES BURROUGHS

# Does the Weather Really Matter?

the social implications of climate change





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# Preface

'What a silly question!' I hear you say. Any fool knows the weather matters. So why pose the question? The answer lies in the weasel-word 'really'. The whole issue of the potential impact of climatic change, whether natural, or as a result of human activities, depends on how sensitive our economic and social structures are to such changes. Only by asking direct questions about what has been the real impact in the past and how much future developments are likely to take us into new territory can we assess whether the various options for action are worth the effort. This also takes us into difficult areas associated with our ability to forecast and how societies respond to both unexpected changes and to apparently believable forecasts. All these matters have been the subject of an immense amount of expert analysis: UN-sponsored programmes have crawled over issues and drawn on the expertise of a vast number of specialists in the field of meteorology, climate change and its impact on economic and social systems; environmental movements have pressed vigorously to get action on alleviating the worst predictions before they become reality; and leading politicians have nailed their colours to the climatic-change mast.

This leads to a second question: with so much comment and analysis around, why produce another book? The reasons are fourfold. First, there is the issue of perspective. Much of the work, while taking a lengthy view of the future, is inclined to look at only a limited part of the historical evidence of the consequences and nature of past changes. Although there are good reasons for concentrating on both recent events and reliable measurements of how the climate has changed, there is a risk of losing sight of how we have adapted in the past and may adapt in the future. So making certain, we wring as much as possible out of the lessons of the past to get the best possible sense of historical perspective. It pays to take this long view. As Chairman Mao is reputed to have said, when asked what the impact of the French Revolution on history was, 'it is too soon to say.'



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The second issue is that of accessibility. The major international analytical work (e.g. the four volumes produced by the International Panel of Climate Change, IPCC) is monumental, but it is not readily digested by the average person. The provision of executive summaries helps, but this serves principally to present the consensus view and, in so doing, does not provide the general reader with the more exhilarating flavours of the intense debate surrounding the questions of the reality of climatic change, the reliability of forecasts and the potential implications of change. Given that the handling of these issues by the media often amplifies the more strident parts of the debate, there is a continuing need to make the arguments as accessible as possible.

This leads naturally to the third point: the question of balance. Some authors have chosen to simplify the issues which are presented with admirable balance in the IPCC reports, by taking a partial view of the arguments. This can give the impression either that future developments will follow certain paths and hence that immediate massive action is now essential or that the whole matter is a storm in a teacup. The interests of all of us are not well served by any such rush to judgement. What is at stake both in the potential costs of action or inaction and the benefits flowing from the correct choices is far too great to allow the issues to be oversimplified. It is vital we have a balanced view of how much we know and how much we can rely on this knowledge to make politically difficult decisions about the future allocation of resources to confront the national and international challenges of climatic change. The political backlash that has developed in recent years, notably in the USA, against the more extreme claims of the climatic change community is a good example of this issue. Unless the arguments are credible to the electorate and their chosen representatives they will have no impact.

This does not mean I am intent on using uncertainty to avoid making decisions by ducking behind the smokescreen of needing to do more research. Whether we like it or not, decisions are being taken now which will affect our capacity to adapt to whatever climatic changes are in store. So we may regret having failed to exploit information we already have at our disposal. Facing up to the need to act now, while recognising that research will continue that will provide additional information for making better decisions in the future, is all part of this balance. So making the most effective use of current knowledge to identify how we can minimise subsequent scientific, economic and social ramifications of climatic change



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needs continual updating. Without this analysis we are not likely to convert the sceptics in business and politics to the need for action.

Finally, there is a need for a sense of realism. The pursuit of an ideal of, say, having a stable climate which is subject only to natural variability, whatever that might be, sounds fine in principle. In practice, however, all human activities will have some impact on the environment, and so the best we can hope to do is minimise the harm we will do. Likewise, building an impressive argument for action on the basis that the impact of predicted global warming over the coming 200 years will be immense is unlikely to cut the mustard with politicians intent on reducing the budget deficit and getting re-elected. So, while we must confront the implications of the attitude exemplified by Maynard Keynes's observation that 'in the long run we are all dead', there is no point in ignoring the political reality that longer term issues rarely intrude into decision-making unless they can be translated into more immediate concerns. This means placing emphasis on options which both appear to contribute to the longer term aims and also make good economic sense now. At the same time, the dangers of over-reacting to isolated extreme events, which appear to confirm certain predictions, is equally relevant, especially where successive events seem to ring contradictory alarm bells.

#### Notes

1 IPCC (1990), (1992), (1994), (1995).