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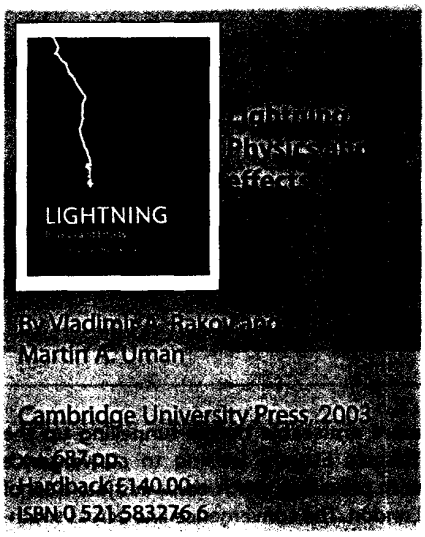

The 20 chapters of this book present a discussion and explanation of almost every conceivable aspect of lightning, from its development, structure, behaviour, forecasting and modelling, to aspects of lightning elsewhere in the solar system and the effects of lightning strikes on animals (including man). Each chapter has its own set of references and bibliography, often numbering several hundred citations (there are over 6500 sources listed). The references are up to date – material published in 2001 is cited in the text. The book is well illustrated, with numerous clear diagrams and tables, black and white photographs and ten colour plates. Because the book has been written by the two authors throughout, writing style and layout is consistent between chapters, which makes reading the text much easier.

It is almost churlish to criticise a work of this magnitude, but there are several aspects of the book which I found annoying. Primarily, I do not think that the authors have considered the readers' needs in sufficient detail, which is a shame given the amount of work involved in collating the material for the book. This is certainly not a book to be read from cover to cover; it is far too detailed to read in 'one' sitting. In addition, readers are likely to be drawn from a wide range of disciplines and many will be interested in specialist aspects of lightning without necessarily wanting to look through all the material presented. Neither, however, is the book structured as an encyclopaedia, and it is not easy to dip into. There is no formal glossary so, whilst definitions and explanations are clearly introduced at appropriate points, the reader usually has to hunt through preceding text to be clear about the meaning of material from earlier sections and chapters. Table 1.1 partly acts as a glossary for most units used but is not clearly signposted in later text, and abbreviations tend to be explained once. Also, the index needs to be used with some imagination. For example, although there is a chapter on lightning hazards to humans and animals, neither 'human' nor 'animal' appears in the index, although 'deaths by lightning' and 'hazards' do. There are no legends to the colour plates (in the middle of the book), so it is necessary to read through the chapters in order to find out what the plates are about. There is inevitably overlap and cross-referencing between chapters, but I was surprised to see a separate appendix listing books on lightning, even though many of the books appear in various chapter reference lists.

These presentational issues aside (most of which should be addressed in the next edition), the authors are to be commended for producing such a comprehensive text. I am sure that this will be one of the definitive books on lightning for several years to come. The book should be in the library of anybody working on lightning and its effects, and will certainly be of value to students and researchers in the atmospheric sciences as a textbook, detailed reference and bibliographic source.

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