

# Correspondence

In his interesting review of *The Hurricane and Its Impact* by Robert H. Simpson and Herbert Riehl (*Aust. Met. Mag.*, 29, December 1981) P. G. Price has commented adversely on the authors' description of the occurrence of tropical cyclones in the Australian region, a supposed strong bias towards northern hemisphere considerations in view of a claim (which appears only on an inside flap of the publisher's dust cover) that the book is a definitive text on tropical cyclones throughout the world, the unsystematic use of a multiplicity of units, and generally poor editing of material. Mr Price then reaches an apparently justifiable but rather damning conclusion that the book fails to make a useful contribution to study by Australian technical users, decision-makers and students.

It would be unfortunate if such an impression was to dissuade potential readers of this book, particularly those with a serious interest in the search for solutions to a wide range of hurricane problems, including the implementation of techniques for mitigation of their effects — about which this book is mainly intended — from reaching their own conclusions as to its usefulness. While not denying that a number of technical howlers have occurred — for example the Timor Sea is incorrectly referred to as the Coral Sea on three occasions — may I paraphrase the often-used proverb about not seeing the wood for the trees (Heywood 1546) by my own 'let not the scud obscure the storm' (Southern 1982) in consideration of *The Hurricane and Its Impact*.

Give the authors their just due. At no point in their preface do they claim an audience outside the United States of America; nevertheless, they have gone to some length to place the hurricane problem in a global context and have constantly reiterated in the text and diagrams the distinction between rotational effects and circulation patterns in both hemispheres to avoid confusing readers 'down under'. Noting that severe tropical cyclones are not even referred to as hurricanes in this country and our relatively limited cyclone-affected population I thought the references to Australia were rather generous. But this is by the way. It is clear from the authors' introduction that the main purposes of the book are 'to define and describe the physical nature of the hurricane and its impact at sea and in the coastal zone'; 'to provide fundamental knowledge and some methods for estimating and analysing the threat as a basis to protect life and property and natural resources in the coastal zone'; and generally to promote a comprehensive awareness of the total nature of the impact of hurricanes in the interest of

effective human co-existence with this recurring natural hazard. The authors also recognize in their preface the difficulty of fully satisfying all their readers having regard to their likely diverse interests. I consider your reviewer may have allowed a geographical prejudice to cloud his recognition of the main intentions of the book, and its intended market among students and technically-oriented users of many disciplines.

Regarding the multiplicity of units, it is not reasonable to blame US authors for quoting a variety of well-known units approved nationally and internationally for technical use in the interfacing maritime — coastal environment (e.g. knots, m/sec, km/h). Official hurricane warnings in the USA use miles, miles/hour to denote the extent of storm affected areas and storm motion and storm surge height in feet. (Reference Hurricane Operational Plan, WMO Regional Association IV.) I rather suspect a farmer from Ohio (or the Darling Downs for that matter) would prefer to survive a 10ft storm surge that be submerged in one of only 3m! (Even my latest copy of *Journal of Applied Meteorology* (April 1982) expresses crop yields — a user-oriented phenomenon — in terms of bushels/acre in response to application of pounds weight of fertilizer and rainfall in cm, mm and inches!) Recognising the problem, Simpson and Riehl have been entirely reasonable in providing tables relating SI units to those of early metric, maritime and English units and their respective conversion formula.

The severely critical assessment of your reviewer should hasten the authors to prepare a revised edition of the book in order to remove several technical blemishes. However, I believe a more evenly-balanced judgment would recognise that *The Hurricane and Its Impact* provides a fine opportunity for an intelligent readership to effect a transfer of hurricane science and technology, warning and response experience, and hurricane awareness philosophy from the USA to the Australian environment.

R. L. Southern

## Reply

The book's authors say that it is directed in part towards undergraduate instruction, and in part towards technical users; about 70 of its 400 pages are devoted to 'The worldwide setting'; the publishers claim it to be a definitive text throughout the world; Mr Southern in his recent review of the book (*WMO Bulletin*, 32, 66-7, 1982) recommends it for world-wide readership. I assessed the book with a sub-set of this audience — Australian

technical users, decision makers and students, not farmers from Ohio or the Darling Downs — in mind. From that perspective, I believe that many of the imperfections and shortcomings I identified are more than mere technical blemishes or howlers; and that the dismaying mixtures of units, often without

apparent reason, will confuse. I have the greatest admiration for the scientific work of Professors Riehl and Simpson and I would be delighted to see a revision of *The Hurricane and Its Impact* to the standard this extremely important topic deserves.

**P. G. Price**