

# ROYAL METEOROLOGICAL SOCIETY: AUSTRALIAN BRANCH MEETING

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## Simple Coupled System Climate Models

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Dr Webster, CSIRO Division of Atmospheric Physics, emphasised the economic importance of climate and then discussed the types of models used currently in research into climate of larger than synoptic time scale. He classified the types as (1) general circulation models (GCMs) with integration of three-dimensional equations, (2) balance models with simple one-dimensional heat equations, and (3) aggregate models or domain-averaged models, which might be regarded as simplified GCMs or complicated balance models.

He went on to describe in detail his recent work on an aggregate model in which there is a 'continent' symbolic of the lithosphere, and an 'ocean', symbolic of the hydrosphere. There is separate zonal averaging over land and sea, and parameterisation of various mechanisms. The results, found at length by use of a computer, agree with many observed features of the earth's atmosphere, in particular some of the differences between oceanic and continental climate and the break of a monsoon.

In summary, Dr Webster stressed the importance of the representation of land, sea, air, and ice in his model. He also advocated aggregate models as a tool to understand better the mechanisms of climate on a seasonal time scale, not, at their present stage of development, to predict climate.

The interest and appreciation of the audience was indicated by the liveliness and length of their questions and discussions.

P.G.D.

