

AUSTRALIAN BRANCH COMMITTEE ACTIVITIES

TOPICS DISCUSSED AT MEETING 8 JUNE 1978 INCLUDED:

1. 1979 Summer Conference. Details will be available at a later date.
2. Branch nominee to replace Dr. Radok on Australian Meteorological Magazine Editorial Committee.
3. Ballot to amend by-laws.
4. Working group on education.
5. Branch Award.

NEWS

CANBERRA METEOROLOGICAL SOCIETY (From Newsletter June 1978)

Committee now stands as follows:

Chairman: Mr. Ian B. Mason, Met. Bureau.

Secretary/Treasurer: Ms. Mary Attik, Met. Bureau.

Committee: Mr. Mark Patterson, Dept. Environment, Housing & Community Development.

Committee: Mr. Bob Galloway, CSIRO Division of Land Use Research.

Our last lunchtime meeting on the 14th June incorporated the Annual General Meeting. Ian Mason of the Bureau of Meteorology was elected chairman for a term of 2 years. A short statement, reiterating the aims of the Society, was made by Mr. Mason and is printed below.

"The Canberra Meteorological Society will be most useful as a kind of inter-disciplinary group, containing as it does many people whose interest in meteorology and climatology is more or less peripheral to their main line of work. It should serve as a place in which people with this common interest can meet. I hope that the lunchtime talks will continue to be, as they have been in the past, relatively informal but stimulating discussions of meteorological aspects of work in progress."

CONTRIBUTIONS

NEAR-RECORD SNOWY RIVER FLOOD

The first weekend of the 1978 winter saw the Snowy River flats near Orbost (eastern Victoria) experiencing one of their worst floods on record. The river at Orbost rose to a peak of 9.28 m at 0430 EST on 4 June (see Fig.1), 5.28 m above flood level. Only four higher peaks have been recorded (since 1920) - 9.96 m in February 1971, 9.85 m in January 1934, 9.75 m in July 1932, and 9.48 m in June 1952. The flooding was caused by widespread heavy rain (see Fig.2 for its spatial distribution and Fig. 3 for its temporal distribution) falling on an already wet catchment - the Snowy had experienced minor flooding due to heavy rainfall only two weeks previously. The rain was associated with a "cut-off" low pressure system which had formed off the northern New South Wales coast and drifted slowly to the southwest. The low was centred just to the northeast of Melbourne at 1300 EST on 3 June (see Fig.4) at which time much of Victoria was covered by a blanket of rain-producing cloud (see Fig.5).

Acknowledgements - G.J. Bedson, J.D. Jasper, T. Kneen and P. Parker of the Bureau of Meteorology's Victorian Regional Office. Figure 5 courtesy Bureau of Meteorology Head Office.

H. STERN

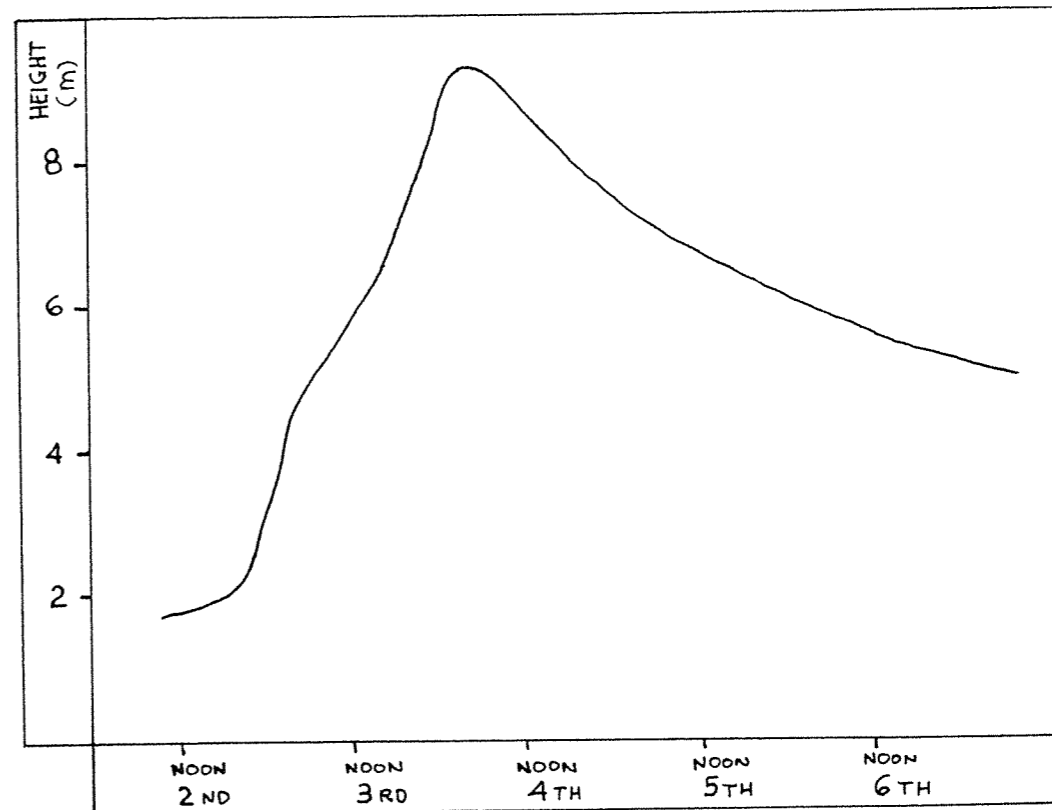


FIGURE 1. Hydrograph Illustrating Trend in Height of Snowy River at Orbost - 2 June 1978 to 6 June 1978.

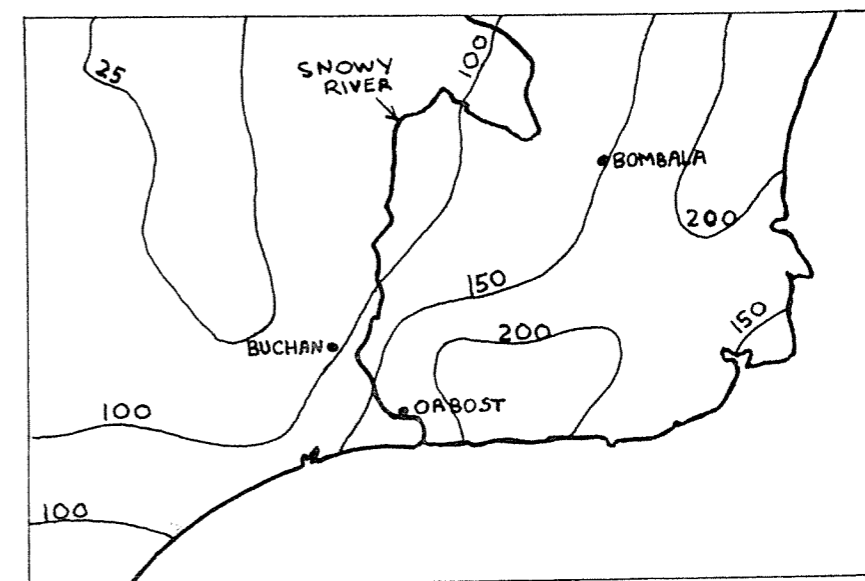


FIGURE 2. Isohyetal Analysis for 72 hour period ended 0900 EST, 4 June, 1978 over southeast corner of Australian continent (rainfall in mm).

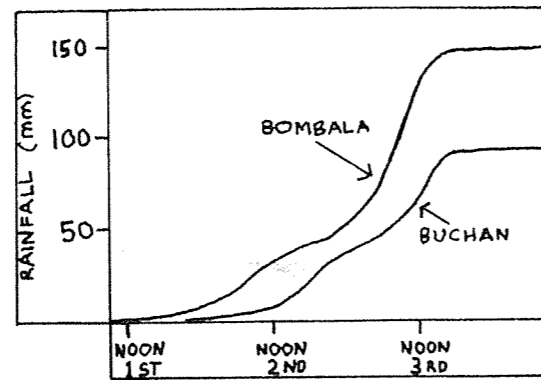


FIGURE 3. Accumulated rainfall at Bombala and Buchan from 0900 EST 1 June 1978.

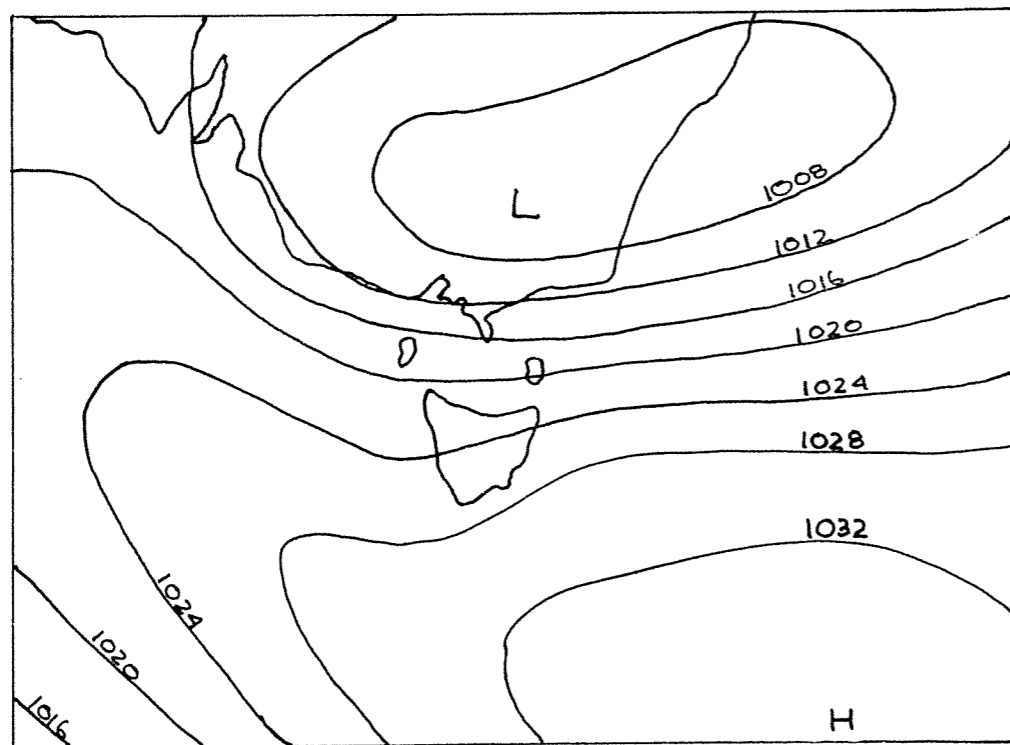


FIGURE 4. MSL pressure (mb) analysis over southeastern Australia - 1300 EST 3 June 1978.

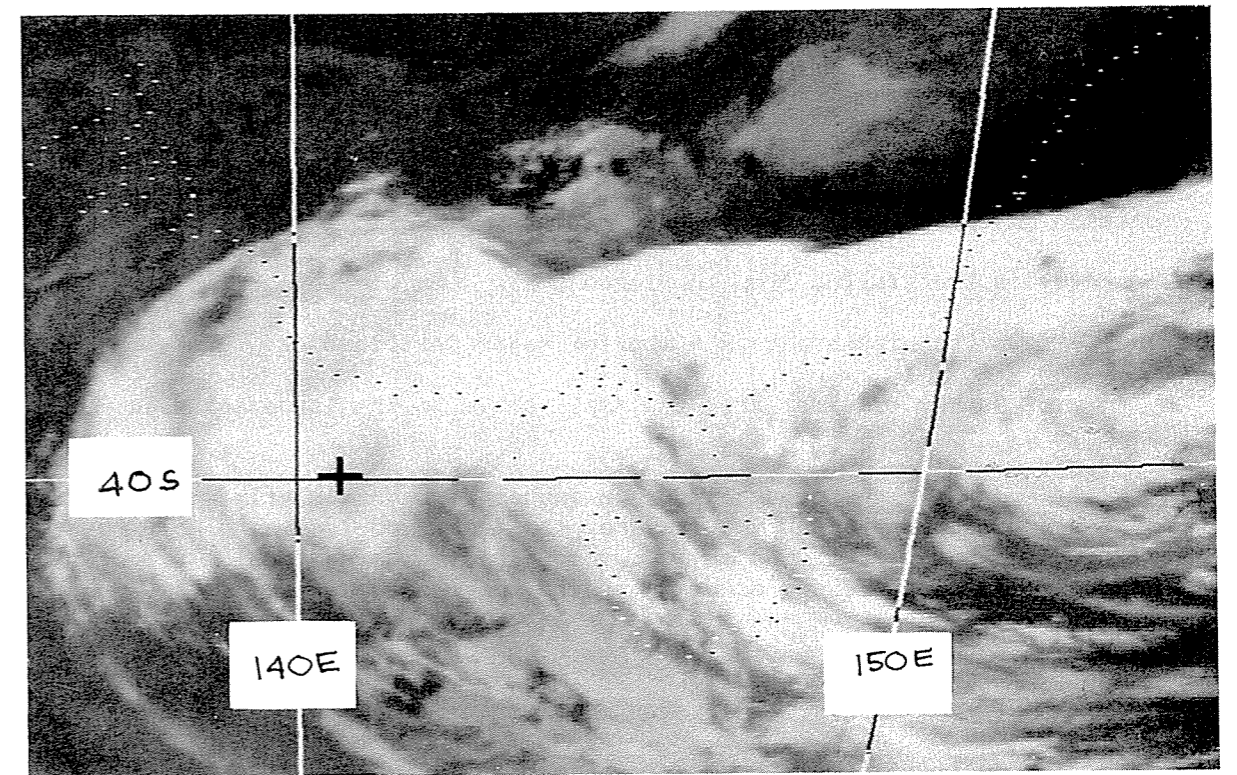


FIGURE 5. Southeast Australian portion of Geostationary Satellite photograph (infrared) - 1300 EST 3 June 1978.

LETTERS TO THE EDITOR

Sir,

Recently there has been some interest in numerical forecasting techniques. Unfortunately the current techniques suffer from a number of deficiencies. As with a chain which is only as strong as its weakest link, so a numerical forecast is only as good as its poorest assumption. Space limitations do not allow a detailed description of all these weaknesses.

The Boundary Conditions presently being used at the interface between the large and small scale nested grid have a number of disadvantages. One condition uses a "drag" or "radiation" term with the large scale model output as a background. Others include false extra diffusive terms. The former is approximately valid in a number of situations. These cases include:-