

REPLY

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There are two types of jet stream, one in the sub-tropics and the other in higher latitudes. It is the sub-tropical jet stream with which we are mainly concerned in Australia, but on occasions a high latitude wind maximum will appear in addition, so that we may have a "double jet".

Daily 200 mb. charts, show on occasions a second high latitude jet at about latitude 40 to 45 degrees south. Work now being done, and later to be published, shows that the high latitude jet appears with frequency of 1 to 5 days per month. For example, of the seven "jet and cloud" days reported in the Cambridge return for June 1954, six of these were associated with the single sub-tropical jet stream (latitude 25 to 30 deg. S.), while one appeared to be associated with a "secondary" jet at about latitude 43 degrees south.

These maxima in higher latitudes seem to accompany the passage of cyclones across and south of Tasmania, and are spasmodic phenomena compared with the more permanent lower latitude jets. It has been noticed that the former frequently appear to coalesce rapidly with pre-existing sub-tropical jets.

The carefully-made observations at Cambridge are of interest and it would be of value to continue them.