

CORRESPONDENCE

Sferics at Charleville

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Generally, the sferics fix has been noticed in an area of trough formation. Whilst on the majority of occasions precipitation of some nature has been reported by surrounding stations.

There have been, in a number of instances, fixes where from surface observations it does not appear possible to have thunderstorm activity. I had been inclined to disregard such fixes as being in error, but a recent instance has caused a change of mind so that I regard the fix as accurate until shown otherwise by observation.

The surface chart for 2300Z 23rd February 1959 showed a trough extending over Tennant Creek-Birdsville-Tibooburra with the 2230Z sferics having fixes at $27\frac{1}{2}$ S, $139\frac{1}{2}$ E and $27\frac{1}{2}$ S, $140\frac{1}{2}$ E. Whilst there was a sharp trough with high surface dew points, the absence of activity during the previous 48 hours combined with the almost complete absence of cloud at surrounding reporting stations made the fixes suspect. On this day a scheduled flight via Channel Service 2-Charleville-Broken Hill and a routine Royal Flying Doctor Service flight Charleville-Tanbar-Birdsville, confirmed the activity as being widespread from Windorah-Tanbar-Birdsville and to a lesser degree to the south and southwest. Subsequently the 0248Z and 0536Z sferics gave isolated light fixes in this area. Birdsville was the only regular reporting station to receive rain (7 points) but through Royal Flying Doctor Service it was reported that Kihee, $27\frac{1}{2}$ S, $142\frac{1}{2}$ E, received 100 points and Clifton Hills, $26\frac{1}{2}$ S, $139\frac{1}{2}$ E, 50 points.

One other point of a general nature is that where lines of sferics have been located particularly over inland Queensland and New South Wales along a trough, the activity has been usually 50 to 60 miles east of the surface trough.

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