

A VIOLENT WINDSTORM STRIKES MILDURA AND DISTRICT

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A violent windstorm was experienced in the Mildura district on 7th November, 1954, in the late afternoon. The full force of the storm covered a width of from $1\frac{1}{2}$ to 2 miles. It appeared to originate to the north west of Wentworth and followed a course through Yelta (the extreme north western tip of Victoria), eastern Merbein, across the Old Mildura estate, through Mildura over the section 11th to 15th streets, over Irymple and Nicholls Point, finally expending itself over the new settlement of Monak N.S.W. In short, the storm closely followed the course of the Murray River.

The hail (round and small) accompanying the storm together with the violence of the windstorm denuded vineyards, in the $1\frac{1}{2}$ to 2 mile strip of fruit, leaves, and in many cases of canes which normally would bear next year's fruit. Soft fruits such as apricots also suffered severe loss. Many houses and other buildings were unroofed, fences razed, and trees uprooted. In one particular spot in Langtree Avenue, three huge pepper trees (old timers of Mildura) were uprooted, a definite illustration of the violence of the storm.

The Department of Agriculture subsequently carried out a survey of the damage to vineyards and a careful assessment showed a total loss of fruit (chiefly currants and sultanas) amounting to 3000 tons of an approximate value of £300,000. The damage was done both by wind and by hail, the high wind stripping the foliage and leaving the fruit and vines exposed to the violence of the hail. A sudden deluge caused guttering to overflow and for some time the city drainage system could not cope with the rush of water.

The meteorological situation on November 7th was as follows :- A vast tropical depression covered the greater part of the continent and the MSL pressure at Mildura at 1500 of 999.3 mbs. was the lowest reading on the synoptic chart. The barograph at Mildura had been most unstable during the day with alternate sharp falls and sharp rises, apparently the effect of passing large Cb. clouds. The relative humidity was high and fore-noon winds were northerlies blowing at 13/17 mph. The minimum overnight temperature was 65.9 at 0430 and the maximum during

the day was 97.6 at 1235. A duststorm had blacked-out Broken Hill during the morning, and the ANA DC4 on the Essendon/Mildura/Broken Hill run could not touch down at Broken Hill and was forced to return to Mildura. Dust was approaching the Mildura area shortly after noon, but at 1235 a "discon" occurred over this area with a sharp wind change to 240° at 25 mph, and the dust was forced away from this area. The temperature fell 2° to 95, with the dewpoint constant at 51.

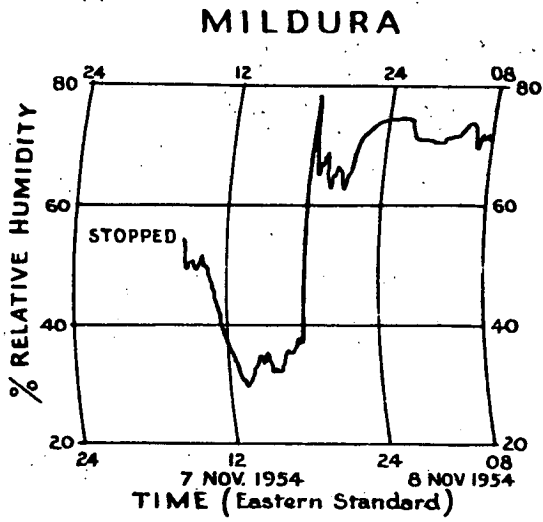
Scattered large Cb. clouds with bases 5000 to 6000 ft. passed over the district throughout the day. At approximately 4 p.m. a vast Cb. cloud was noticed to the west-north-west, and by 5 p.m. it was immediately to the north of the Mildura aerodrome. A Mustang pilot flying from Williamtown to Mildura at this time had to detour many miles to avoid this cloud. The Cb. presented an awe-inspiring sight with its base at 6000 ft., and tops of well-defined anvil cirrus which appeared to exceed a height of 25,000 ft. With the sun behind it, the cloud appeared multi-hued. With beautiful silver edges, the predominating colour of the cloud was deep purple mixed with brown (apparently due to dust from Broken Hill), and with touches of a peculiar greenish colour where the cloud appeared to be in constant upheaval with apparently severe turbulence. No funnel cloud development characteristic of a tornado was observed.

With the passage of the cloud to the northeast of the aerodrome at 5.15 p.m., a violent windstorm struck the district. The wind veered suddenly from 240° to 350° and for 6 minutes attained a steady velocity of 75/80 mph on the meteorological office anemometer, with one gust of 83 mph. The aerodrome appeared to be only on the fringe of the storm and it is easy to imagine velocities of 100 mph in the main course of devastation. An instantaneous fall in temperature from 95° to 67° was registered at the meteorological office, with a pressure rise of from 995 mbs to 1004 mbs. Soon afterwards, the wind backed again to 230° with the temperature again rising to 75° . Only 5 points of rain occurred at the meteorological office but a deluge of rain with hail occurred in Mildura city - 58 points being recorded in 10 minutes.

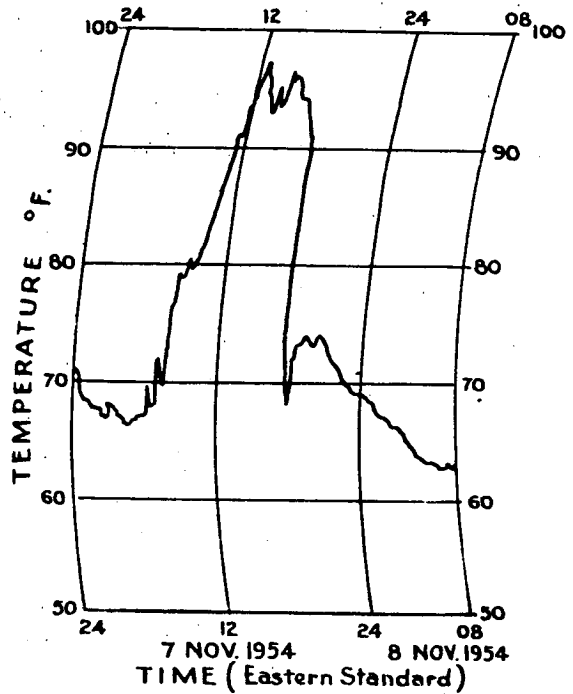
Following the passage of the Cb. cloud winds quickly reverted to southwest with the temperature again rising. The south westerlies persisted over the following day, with frequent showers over the area, and the barograph continued to show an unsteady trace.

The autographic records at Mildura for the day of the storm are shown on the opposite page.

MILDURA

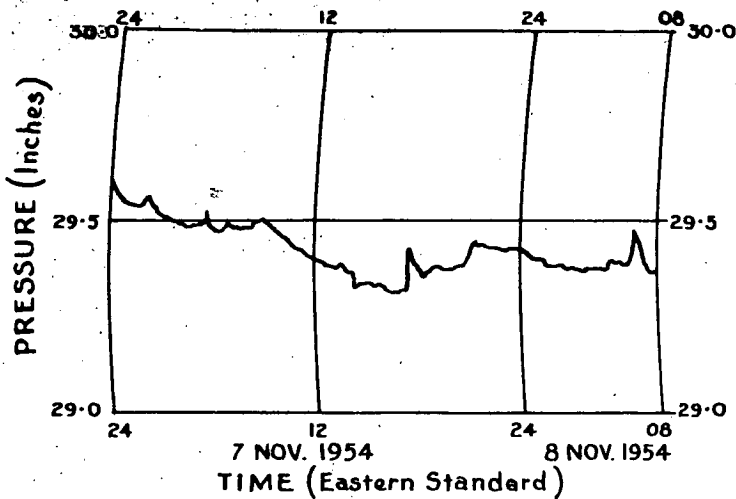


HYGROGRAPH TRACE



THERMOGRAPH TRACE

MILDURA



BAROGRAPH TRACE

AUTOGRAPHIC RECORDS AT MILDURA FROM 0000.E.S.T. TO 0800.E.S.T.
8.TH. NOV. 1954.