

Annual Weather Review

Armidale NSW - 2023

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2023 was a warm year with below average rainfall. Sunny weather prevailed on 174 days and it rained on 105 days.

RAINFALL: The total for the year of 684.2 millimetres was 99 mm lower than the long term average (LTA), and it was the driest year since the drought year of 2019. Rainfall was below average in all months except March, November and December. It was particularly dry from May to September with only 67.0 mm recorded during this period, the result of a number of strong high pressure systems over northern New South Wales confining rain bearing systems to southern and central parts of the state. The wettest month was March with 165.6 mm, and the driest was September with just 4.4 mm. The highest daily fall was 62.2 mm on 29th March.

TEMPERATURES: Day temperatures were higher than normal, particularly in the winter months resulting in the warmest winter on record. It was most unusual that there were no severe cold outbreaks. Maximum temperatures dropped below 10.0C on just one day (LTA 13 days). The months with the greatest deviations above the LTA maximum were March, July, August, September, October and December, while the month with the greatest deviation below the LTA minimum was May. Temperatures reached 30.0C or higher on 27 days which was 10 days more than the LTA. The highest maximum was 33.5C on 7th & 9th December, the coldest day was 29th June with a maximum of 9.6C, and the coldest overnight minimum was -9.2C on 20th July.

WINDS: Winds were light in March, May, June, July, August, and November, and moderate in the remaining months. The year totalled 10 windy days* (annual average 15 days). Wind direction at 3pm at Armidale airport: west: 139 days, east: 72 days, south-west: 58 days, north-west: 27 days, south-east: 26 days, south: 25 days, north-east: 11 days, north: 7 days.

EVAPORATION: Pan evaporation for the year totalled 1,228.8 mm, 42 mm higher than the LTA. Average daily evaporation for the year was 3.4 mm.

FROSTS: Because of the high number of calm clear nights the total number of frosts for the year was 117 which is 20 higher than the LTA, and was the highest since 2013 which also recorded 117 frosts. July and August were the frostiest months recording 23 frosts each.. There were 44 light frosts, 45 moderate frosts, and 28 severe frosts**. The first frost was on 4th May, ending a frost-free period of 134 days over the summer of 2022-23, and the last frost was on 17th October.

FOGS: There were fogs on 24 days which is 7 less than the LTA. The foggiest month was July with fogs on 5 days. Fogs all occurred in the early mornings. There may have been additional early morning fogs which were not observed.

SNOW: There were no snowfalls in 2023. The annual average is 2.2 snow days.

THUNDERSTORMS: Thunderstorm activity was higher than than normal with storms on 44 days, 7 more than the LTA. Thunderstorm activity was highest in December with storms occurring on 10 days. There may have been additional days with thunder which were not recorded. There were no severe thunderstorms.

HAIL: Hail was observed on two days. 27th October at 1am with hailstones up to 2 cm diameter completely whitening the ground. 25th December at 7.15pm with sparse hailstones up to 1 cm diameter mixed with rain. There may have been additional falls of small hail during thunderstorms on other dates which were not recorded. The annual average is 3.3 hail days.

FLOODS: Minor flooding occurred in Dumaresq Creek on 29th March & 20th December. Minor or flash flooding may also have occurred on other dates not noted here.

LTA - Long Term Average * Windy day - average wind speed higher than 20 kms per hour from 9am to 6pm

** Intensity of frosts: light - minimum temp > 0.0C, moderate - min temp -3.9C to -0.1C, severe - min temp < -3.9C.

Weather Statistics 2023 - Armidale NSW

Data recorded at East Armidale, elevation 987 metres, Bureau of Meteorology station no 56037

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| RAINFALL mm | 81.4 | 64.8 | 165.6 | 31.8 | 12.4 | 26.0 | 15.4 | 8.8 | 4.4 | 46.8 | 97.6 | 129.2 | 684.2 |
| Long Term Average mm | 101.2 | 88.3 | 66.4 | 44.5 | 42.4 | 54.6 | 47.6 | 47.9 | 50.6 | 68.2 | 82.4 | 89.0 | 783.0 |
| RAIN DAYS | 14 | 10 | 15 | 11 | 2 | 6 | 6 | 3 | 3 | 5 | 16 | 14 | 105 |
| Long Term Average days | 10 | 10 | 10 | 8 | 8 | 10 | 9 | 9 | 8 | 9 | 9 | 10 | 110 |
| HIGHEST DAILY RAINFALL mm | 21.8 | 27.4 | 62.2 | 16.2 | 12.0 | 15.4 | 7.4 | 5.8 | 3.0 | 34.8 | 18.6 | 43.4 | 62.2 |
| Day | 24 | 28 | 29 | 8 | 16 | 23 | 5 | 18 | 29 | 27 | 10 | 20 | |
| AVERAGE DAILY MAX TEMP deg C | 26.8 | 26.5 | 25.6 | 18.5 | 15.9 | 14.6 | 14.7 | 17.8 | 21.6 | 23.6 | 23.8 | 28.2 | 21.5 |
| Long Term Average deg C | 26.7 | 25.5 | 23.5 | 20.2 | 16.4 | 13.2 | 12.7 | 14.4 | 17.9 | 20.9 | 23.1 | 25.3 | 20.0 |
| AVERAGE DAILY MIN TEMP deg C | 12.5 | 11.7 | 11.9 | 7.4 | -0.6 | 0.0 | -0.8 | 0.7 | 1.8 | 4.6 | 10.8 | 12.2 | 6.0 |
| Long Term Average deg C | 12.9 | 12.6 | 10.5 | 6.5 | 3.0 | 0.8 | -0.3 | -0.2 | 2.6 | 5.8 | 8.9 | 11.2 | 6.2 |
| AVERAGE GRASS MIN TEMP deg C | 8.1 | 7.5 | 8.1 | 2.5 | -5.2 | -4.2 | -5.4 | -4.6 | -4.2 | -1.1 | 6.8 | 8.2 | 1.4 |
| Long Term Average deg C | 9.8 | 9.7 | 7.5 | 2.9 | -1.5 | -2.8 | -4.1 | -4.3 | -1.4 | 2.1 | 5.6 | 8.0 | 2.6 |
| HIGHEST MAXIMUM TEMP deg C | 31.6 | 31.0 | 31.0 | 22.0 | 19.9 | 20.0 | 20.1 | 20.3 | 27.5 | 30.7 | 30.4 | 33.5 | 33.5 |
| Day | 26 | 18 | 19 | 4 | 23 | 3 | 30 | 1 | 18 | 25 | 13 | 7,9 | |
| LOWEST MAXIMUM TEMP deg C | 20.3 | 19.5 | 17.0 | 15.5 | 11.5 | 9.6 | 10.3 | 11.2 | 14.9 | 14.6 | 16.4 | 20.5 | 9.6 |
| Day | 22 | 23 | 31 | 10 | 8 | 29 | 3 | 19 | 9 | 27 | 20 | 20 | |
| HIGHEST MINIMUM TEMP deg C | 16.9 | 16.8 | 17.5 | 11.7 | 10.2 | 8.9 | 9.5 | 10.7 | 11.9 | 13.8 | 14.4 | 16.9 | 17.5 |
| Day | 30 | 1 | 12 | 4 | 16 | 5 | 5 | 18 | 8 | 26 | 24 | 19 | |
| LOWEST MINIMUM TEMP deg C | 8.9 | 3.7 | 3.0 | 2.4 | -6.7 | -7.6 | -9.2 | -4.0 | -5.4 | -0.9 | 6.2 | 7.2 | -9.2 |
| Day | 10 | 5 | 31 | 15 | 28 | 21 | 20 | 1,12 | 10 | 6 | 4 | 1 | |
| LOWEST GRASS MIN TEMP deg C | 3.0 | -1.9 | -1.9 | -2.3 | -11.3 | -12.8 | -14.4 | -10.0 | -10.6 | -5.9 | 0.7 | 1.5 | -14.4 |
| Day | 10 | 5 | 31 | 10 | 28 | 21 | 20 | 12 | 10 | 17 | 4 | 11 | |
| FROSTS | 0 | 0 | 0 | 0 | 26 | 21 | 23 | 23 | 19 | 5 | 0 | 0 | 117 |
| Long Term Average days | 0 | 0 | 1 | 5 | 14 | 16 | 20 | 20 | 14 | 6 | 1 | 0 | 97 |
| FOGS days | 2 | 4 | 1 | 1 | 3 | 1 | 5 | 2 | 4 | 1 | 0 | 0 | 24 |
| Long Term Average days | 1 | 1 | 3 | 4 | 5 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 31 |
| THUNDERSTORMS days | 6 | 6 | 6 | 2 | 0 | 0 | 0 | 1 | 1 | 4 | 8 | 10 | 44 |
| Long Term Average days | 7 | 5 | 3 | 1 | 1 | 1 | 0 | 1 | 2 | 4 | 6 | 8 | 37 |
| EVAPORATION (Class A Pan) mm | 154.2 | 134.0 | 120.6 | 63.8 | 54.0 | 43.0 | 41.4 | 71.2 | 101.2 | 157.2 | 116.0 | 172.2 | 1228.8 |
| Long Term Average mm | 161.7 | 125.7 | 112.4 | 75.9 | 50.5 | 36.3 | 42.1 | 65.6 | 95.1 | 125.7 | 137.9 | 158.7 | 1186.7 |
| AVGE. DAILY EVAPORATION mm | 5.0 | 4.8 | 3.9 | 2.1 | 1.7 | 1.4 | 1.3 | 2.3 | 3.4 | 5.1 | 3.9 | 5.6 | 3.4 |
| AVERAGE DAILY WIND RUN km | 123.2 | 117.0 | 114.7 | 127.7 | 100.3 | 151.6 | 105.7 | 104.5 | 97.5 | 133.1 | 111.1 | 119.9 | 117.2 |
| Long Term Average km | 147.0 | 142.8 | 136.1 | 120.5 | 120.8 | 141.9 | 151.3 | 161.6 | 167.1 | 154.7 | 152.5 | 150.2 | 145.5 |
| PREVAILING 3PM WIND DIRECTION | E | E | W | E | W | W | W | W | W | W | W | W | - |
| FINE SUNNY DAYS ^ | 13 | 13 | 10 | 7 | 23 | 18 | 14 | 15 | 19 | 24 | 5 | 13 | 174 |
| Long Term Average days | 15 | 12 | 15 | 15 | 15 | 13 | 15 | 18 | 19 | 17 | 13 | 15 | 181 |
| MAXIMUM TEMP > 29.9 deg. days | 4 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 12 | 27 |
| MAXIMUM TEMP < 10.0 deg. days | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MINIMUM TEMP < 5.0 deg. days | 0 | 0 | 1 | 7 | 28 | 26 | 28 | 28 | 25 | 19 | 0 | 0 | 162 |

^ Fine Sunny Day - a dry sunny day generally free from excessive cloud

Compiled by Peter Burr, Jan 2024