

The Climate at Armidale NSW

Armidale is located on the New England Plateau in northern New South Wales about midway between Sydney and Brisbane at an altitude ranging from 970 metres at the floor of the valley to 1070 metres above sea level at the crests of the hills.

It has a cool temperate climate with the majority of rain falling in the summer months. Winters are dry, cold and frosty with the occasional snowfall. Summer days are warm but nights are usually cool. Prevailing winds are easterlies during summer and autumn, and dry westerlies during winter and spring. Average annual rainfall is 781 millimetres.

The Seasons

Every year Armidale experiences four distinct seasons as follows.

Summers are characterised by warm to very warm days followed almost always by cool, sometimes cold, nights. Thunderstorms often produce heavy falls of rain and occasionally hail in the afternoons and early evenings, also bringing a sudden drop in temperature to provide relief after a hot summer's day. Unlike nearby coastal areas, Armidale does not usually experience high humidity levels making most of the summer days quite comfortable. Temperatures exceed 30 degrees on average of 17 days per year, but rarely reach higher than 35 degrees.

Autumn is described by many locals as the best time of year in Armidale. As the leaves turn yellow and fall, day temperatures are mostly still warm, particularly in March and April. Days are sunny, the thunderstorm season is over, and rain becomes more sporadic. Nights become colder, and residents often awake to a thick fog blanketing the Armidale valley, but by 9am the fog has cleared to be followed by a bright sunny day. The first frosts of the year usually occur in April, but are not particularly severe.

Winters are cold and bracing. Overnight temperatures often drop below minus 5 degrees with a thick white frost on the ground, and occasionally to as low as minus 10 degrees. These cold frosty mornings are usually followed by sunny days, but beware of the wind. Day temperatures may make it as high as 16 degrees, but sometimes may not climb beyond 10 degrees. These are the true New England winter days with biting westerly winds, bleak grey clouds, and showers of rain and occasionally snow. Rainfalls during the winter months are usually light.

In **spring** temperatures are milder, although early morning frosts still continue well into October. September is usually a cool windy month, and by late October the thunderstorm season is starting with increasing rainfalls. The spring months produce the most variable weather of the year. A week of warm sunny weather can be followed by several cold days with temperatures back at winter levels before gradually warming up again. This cycle often repeats itself many times right through until the start of summer.

Climate Averages & Extremes - Armidale NSW

All available data used to December 2022

	NY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
AV. DAILY MAX TEMP deg C	42	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
AV. DAILY MIN TEMP deg C	42	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
AV. DAILY GRASS MIN deg C	25	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 MAX TEMP deg C <i>Day of Month/Year</i>	42	37.4 19/19	37.6 12/17	33.8 20/15	30.2 4/86	24.8 8/16	22.3 7/02	21.2 20/16	27.4 24/09	28.7 26/13 25/02	32.4 07/19	35.6 23/14	37.8 21/19	37.8
LOWEST MAX TEMP deg C <i>Day of Month/Year</i>	42	14.3 27/84 24/86	14.0 14/09	13.5 26/89	8.9 12/94	6.5 29/00 30/00	3.6 27/16	2.6 3/84	4.4 19/96	6.2 19/84	7.7 12/12	8.0 19/86	12.5 2/86	2.6
HIGHEST MIN TEMP deg C <i>Day of Month/Year</i>	42	21.4 26/82	21.0 2/20	19.6 15/89	17.1 13/98	14.1 2/83	12.7 5/88	11.8 1/81	14.8 25/09	16.8 30/00	16.7 30/88	20.7 30/97	20.0 11/88 2/20	21.4
LOWEST MIN TEMP deg C <i>Day of Month/Year</i>	42	2.6 19/10	2.5 4/05	-1.7 30/08	-5.8 30/08	-8.8 23/82	-11.2 30/10	-10.8 10/06	-10.2 4/94	-7.0 23/91 14/92	-4.7 21/86	-3.0 3/03	-0.5 4/87 7/02	-11.2
LOWEST GRASS MIN deg C <i>Day of Month/Year</i>	36	-2.2 17/18	-0.1 8/18	-5.6 30/08	-9.8 26/04	-13.1 23/82	-15.4 30/10	-15.3 10/06	-13.7 14/02	-12.1 2/17	-8.5 4/13	-6.7 3/03	-5.4 15/22	-15.4
AVERAGE RAINFALL mm	159	101.2	88.3	65.4	44.5	42.4	54.6	47.6	47.9	50.6	68.2	82.4	89.0	783.0
AVERAGE RAIN DAYS	149	10	10	10	8	8	10	9	9	8	9	9	10	110
HIGHEST RAINFALL mm <i>Year</i>	158	274.6 1863	314.2 1878	235.4 1893	236.5 1863	197.6 1963	268.3 1950	161.7 1950	287.9 1949	165.5 1932	194.4 1955	244.4 2011	288.8 1865	1508.0 1863
LOWEST RAINFALL mm <i>Year</i>	158	7.7 1903	1.8 1958	1.3 1874	0.0 1912	1.0 1957	2.2 1986	0.5 1970	0.0 1995	0.0 1879	0.8 1864	4.1 1926	0.3 1864	306.6 2019
AVERAGE EVAPORATION mm	40	160.9	125.7	112.4	75.9	50.5	36.3	42.1	65.6	95.1	125.7	137.9	158.7	1186.7
AV. DAILY EVAPORATION mm	40	5.2	4.5	3.6	2.5	1.6	1.2	1.4	2.1	3.2	4.1	4.6	5.1	3.3
AV. DAILY WIND RUN km	42	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 WIND DIRECTION	42	EAST	EAST	EAST	EAST	WEST	WEST	WEST	WEST	WEST	WEST	WEST	WEST	-
AVERAGE FROSTS days	42	0.0	0.0	0.5	4.9	13.6	16.3	19.5	20.1	14.4	6.2	1.3	0.3	97.2
AVERAGE FOGS days	66	1.0	1.5	3.2	4.4	5.0	4.4	3.4	2.1	1.9	1.7	1.1	1.1	30.7
AVERAGE T/STORMS days	46	6.6	4.7	2.6	1.1	0.7	0.5	0.3	0.7	2.2	4.0	5.6	7.7	36.6
AVERAGE HAILFALLS days	66	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5	3.1
AVERAGE SNOWFALLS days	66	0.0	0.0	0.0	0.0	0.1	0.3	0.7	0.5	0.2	0.0	0.0	0.0	1.9
AVERAGE FINE SUNNY DAYS	39	14.6	11.9	14.7	15.2	14.9	12.6	15.0	18.3	18.5	16.9	13.4	14.6	180.6
AV. SUNSHINE PER DAY hrs	16	8.0	7.8	6.9	6.2	4.8	4.8	5.4	6.2	6.8	7.3	7.7	8.1	6.8

The column headed "NY" indicates the number of years over which data has been used

Temperature, frost, evaporation and wind run averages and extremes calculated from all available data recorded at University of New England/ Bureau of Meteorology weather station at East Armidale (1981-2022), elevation 987 metres
 Sunshine data from University of New England weather station at Laureldale (1977-93), North Armidale, elevation 1060 metres
 All other data including rainfall from composite records at Armidale Post Office (1857-1965), Radio Station 2AD (1965-1997), elevation 980 metres, and East Armidale (from 1997).

Compiled by Peter Burr, Jan 2023