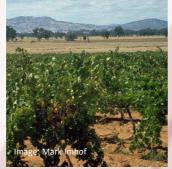
Corowa: A Climate Analogue Town for Ararat for the Year 2090

Analogue based on the maximum consensus of models, based on <u>CMIP5</u>, for the year 2090 and a high emissions scenario, (RCP 8.5). Information developed using the CSIRO <u>Climate</u> <u>Change in Australia</u> Analogue Explorer Tool









Corowa (NSW/Victoria border region)

20 30 40 50 Cer	Centimetres 20 30 40 50 60 80 100 120 160 200		Mean Max. Temperature C ^o			Mean rainfall (mm)		
8 12 16 20 24 32 40 48 64 60 Inches Corowa			Ararat (current)	Ararat (projected 2090)*	Corowa (current)	Ararat (current)	Ararat (projected 2090)*	Corowa (current)
Dan and	1	Spring	18	21.8	21.5	162.9	124	147.2
Ararat		Summer	26.1	29.6	30.8	104.9	94.9	112
		Autumn	19.5	23.0	22.9	122.9	124.2	106.1
No Van	2/	Winter	12.1	15.1	13.9	193.5	176.3	160.8
· · · · · · · · · · · · · · · · · · ·		ANNUAL	18.9	22.4	22.3	584	519.4	526.1

Ararat (Wimmera Victoria)









*This analogue has been further refined to include projected seasonal changes. It assumes an average rainfall decline across the Southern Slopes Region of 11% and average temp. increase of 3.5 C⁰, based on data from the <u>Climate Futures Tool</u>. For Corowa, mean spring & autumn temp. is within +/-0.5°C and average annual rainfall is within +/-1% respectively of this future scenario for Ararat.

Analogue Logic

Information above was developed using the <u>CSIRO Climate Change in Australia Analogue Explorer Tool</u>*

The above analogue is based on the average annual rainfall and temperature in the year 2090, maximum consensus of models (CMIP5) and a high emissions scenario (RCP 8.5). Global GHG emissions are currently tracking at the IPCC's RCP 8.5 scenario that leads to the most warming. To gain insight into potential analogue towns for Ararat, (which assumes we achieve the more ambitious target of limiting warming to between 1.1°C to 2.6°C degrees by 2100), run the Analogue Tool using the RCP 4.5 scenario. This scenario is considered as an achievable, intermediate mitigation scenario where GHG emissions peak earlier (around 2040) and the CO₂ concentration reaches 540 ppm by 2100.

Other analogue towns under a range of RCP's can be explored using the Analogue Tool

*NOTE: variables such as seasonality, frost days & other local climate influences, radiation & soil types were not included in developing this analogue.

*RCP (<u>Representative Concentration Pathways</u>) are among those scenarios used in the IPCC Fifth Assessment Report (2013). The Maximum Consensus scenario was chosen. This is a scenario defined using the <u>Climate Futures</u> approach.

