

EARWIG Results			
Newcastle upon Tyne City Council	Baseline	2050s	Change
TEMPERATURE			
Annual average daily temperature (°C)	8.8	10.6	+1.8
Winter average daily temperature (°C)	4.0	5.4	+1.4
Spring average daily temperature (°C)	7.4	9.0	+1.6
Summer average daily temperature (°C)	14.0	16.2	+2.1
Autumn average daily temperature (°C)	9.5	11.7	+2.1
Annual average average maximum temp (°C)	11.9	13.9	+1.9
Winter daily average maximum temp (°C)	6.7	8.1	+1.4
Spring daily average maximum temp (°C)	10.7	12.4	+1.7
Summer daily average maximum temp (°C)	17.6	20.1	+2.4
Autumn daily average maximum temp (°C)	12.6	14.8	+2.2
Annual average average minimum temp (°C)	5.6	7.3	+1.7
Winter daily average minimum temp (°C)	1.4	2.7	+1.4
Spring daily average minimum temp (°C)	4.1	5.6	+1.5
Summer daily average minimum temp (°C)	10.4	12.3	+1.8
Autumn daily minimum temp (°C)	6.4	8.5	+2.1
Winter extreme 5 th percentile (cold) temp (°C)	-3.6	-2.1	+1.5
Spring extreme 5 th percentile (cold) temp (°C)	-1.2	0.3	+1.5
Summer extreme 5 th percentile (cold) temp (°C)	6.1	7.4	+1.4
Autumn extreme 5 th percentile (cold) temp (°C)	0.1	1.8	+1.7
Winter extreme 10 th percentile (cold) temp (°C)	-2.3	-1.0	+1.4
Spring extreme 10 th percentile (cold) temp (°C)	-0.1	1.4	+1.5
Summer extreme 10 th percentile (cold) temp (°C)	7.1	8.6	+1.5

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Autumn extreme 10 th percentile (cold) temp (°C)	1.6	3.2	+1.6
Winter extreme 90 th percentile (hot) temp (°C)	10.5	11.8	+1.3
Spring extreme 90 th percentile (hot) temp (°C)	15.5	17.5	+2.0
Summer extreme 90 th percentile (hot) temp (°C)	21.2	24.1	+2.8
Autumn extreme 90 th percentile (hot) temp (°C)	17.8	20.5	+2.6
Winter extreme 95 th percentile (hot) temp (°C)	11.7	12.9	+1.2
Spring extreme 95 th percentile (hot) temp (°C)	16.8	18.9	+2.1
Summer extreme 95 th percentile (hot) temp (°C)	22.4	25.2	+2.8
Autumn extreme 95 th percentile (hot) temp (°C)	19.1	21.8	+2.7
RAINFALL			
Average annual rainfall (mm/year)	722	674	-6.6%
Average winter rainfall (mm/month)	60	66	+11.3%
Average spring rainfall (mm/month)	56	55	-2.1%
Average summer rainfall (mm/month)	61	44	-27.9%
Average autumn rainfall (mm/month)	65	60	-7.2%
1-hour extreme 50% AEP rainfall event (mm)	12	11	-8.3%
3-hour extreme 50% AEP rainfall event (mm)	17	17	-2.6%
6-hour extreme 50% AEP rainfall event (mm)	21	21	+4.2%
12-hour extreme 50% AEP rainfall event (mm)	23	26	+15.2%
1-hour extreme 10% AEP rainfall event (mm)	18	16	-9.9%
3-hour extreme 10% AEP rainfall event (mm)	23	27	+18.6%
6-hour extreme 10% AEP rainfall event (mm)	31	37	+17.2
12-hour extreme 10% AEP rainfall event (mm)	35	43	+21.9%

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1-day extreme 50% AEP rainfall event (mm)	23	24	+1.9%
2-day extreme 50% AEP rainfall event (mm)	31	31	+0.8%
5-day extreme 50% AEP rainfall event (mm)	43	45	+4.2%
10-day extreme 50% AEP rainfall event (mm)	60	63	+4.8%
1-day extreme 5% AEP rainfall event (mm)	36	39	+7.4%
2-day extreme 5% AEP rainfall event (mm)	50	54	+6.8%
5-day extreme 5% AEP rainfall event (mm)	65	68	+4.7%
10-day extreme 5% AEP rainfall event (mm)	90	90	+0.2%
SNOWFALL			
Annual average daily snowfall (mm)	0.19	0.05	-74.7%
Winter average daily snowfall (mm)	0.67	0.17	-75.2%
Spring average daily snowfall (mm)	0.04	0.01	-66.4%
Summer average daily snowfall (mm)	0.00	0.00	0.0%
Autumn average daily snowfall (mm)	0.05	0.01	-75.3%
FROST			
Frost days (Tmin < 0) per year	42.3	21.0	-50.3%
WIND			
Average annual wind speed (m/s)	5.3	5.2	-0.1
Average winter wind speed (m/s)	6.0	6.0	0.0
Average spring wind speed (m/s)	5.5	5.4	-0.1
Average summer wind speed (m/s)	4.5	4.3	-0.2
Average autumn wind speed (m/s)	5.3	5.3	+0.0
Mean annual maximum wind speed (m/s)	13.0	13.1	+0.1
SOIL MOISTURE CONTENT			
Winter soil moisture	80.2	80.4	+0.2

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content (mm)	80.2	80.4	+0.2
Spring soil moisture content (mm)	85.3	87.7	+2.4
Summer soil moisture content (mm)	35.2	31.2	-4.0
Autumn soil moisture content (mm)	32.7	27.8	-4.9