SQL queries used:

To get global historic temperatures:

SELECT * FROM global_data ORDER BY year;

To get Riyadh historic temperatures:

SELECT year, avg_temp FROM city_data WHERE city= 'Riyadh' ORDER BY country, city, year;

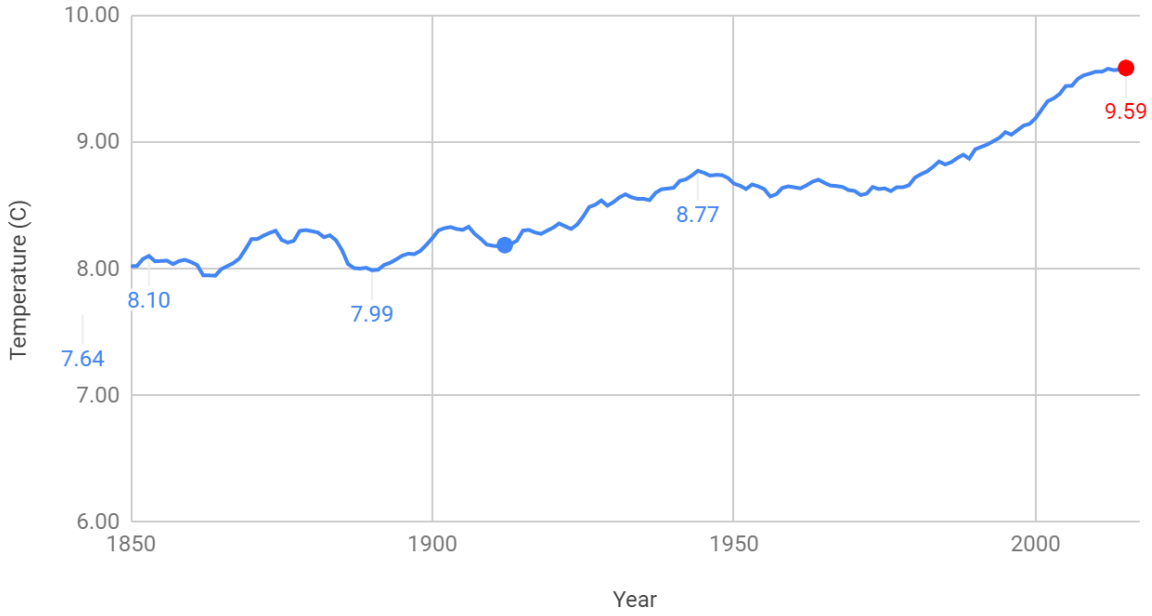
Moving Average Calculation:

I have a 7-year moving average with `AVERAGE(B2:B9)` for the first element at C9 where B is avg_temp, copied across all elements for both global and Riyadh temperatures.

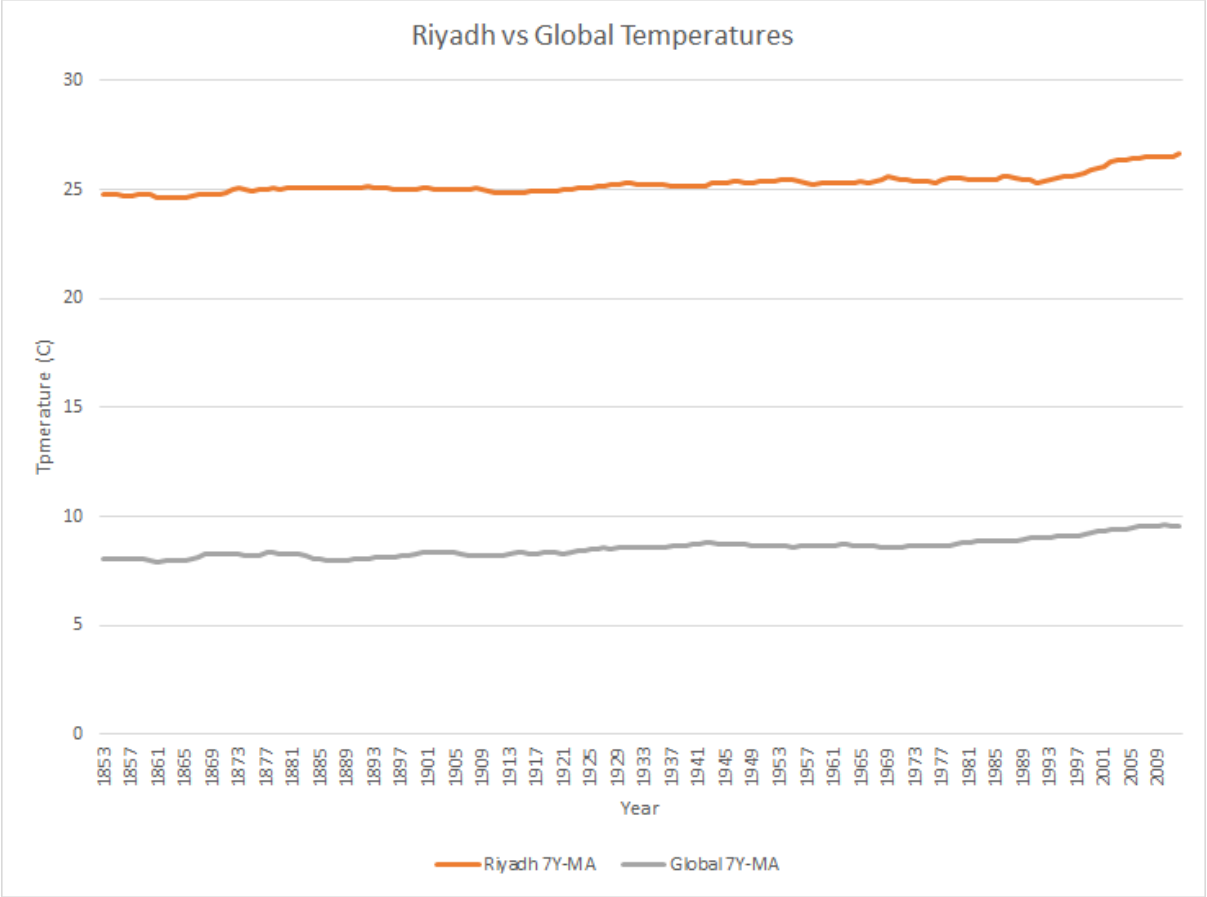
C9 | fx | = AVERAGE(B2:B9)

	A	B	C
1	year	avg_temp	7 Year Average
2	1750	8.72	
3	1751	7.98	
4	1752	5.78	
6	1753	8.39	
7	1754	8.47	
8	1755	8.36	
9	1756	8.85	8.08
10	1757	9.02	8.12
11	1758	6.74	7.94
12	1759	7.99	8.26
13	1760	7.19	8.13
14	1761	8.77	8.17
15	1762	8.61	8.19
16	1763	7.50	8.08
17	1764	8.40	8.03
18	1765	8.25	7.93
19	1766	8.41	8.14
20	1767	8.22	8.17
21	1768	6.78	8.12
22	1769	7.69	7.98
23	1770	7.69	7.87
24	1771	7.85	7.91
25	1772	8.19	7.89
26	1773	8.22	7.88

Historic Trends of Global Temperatures



Historic Trends of Riyadh Temperature



Observations:

1. The temperature in Riyadh is on average around 16C higher than that of the global average
2. The temperature in Riyadh has risen from 24.75 C in 1853 to 26.65 C in 2013, indicating a 1.9C total increase, while the global temperature has risen by 1.5 C in the same time period
3. While the temperature rise in Riyadh is greater than that of the global average, the % change is much less at 7%, while the global temperature has risen by 18% between 1853 and 2013
4. Both the global temperature and Riyadh temperature increase and decrease in very close time periods, with changes in Riyadh being more extreme.