This is the print version of the Skeptical Science article 'It warmed just as fast in 1860-1880 and 1910-1940', which can be found at http://sks.to/trends.

Comparing past climate change to recent global warming

What The Science Says:
Statistical analysis of the rate of warming over different periods find that warming from 1970 to 2001 is greater than the warming from both 1860 to 1880 and 1910 to 1940.

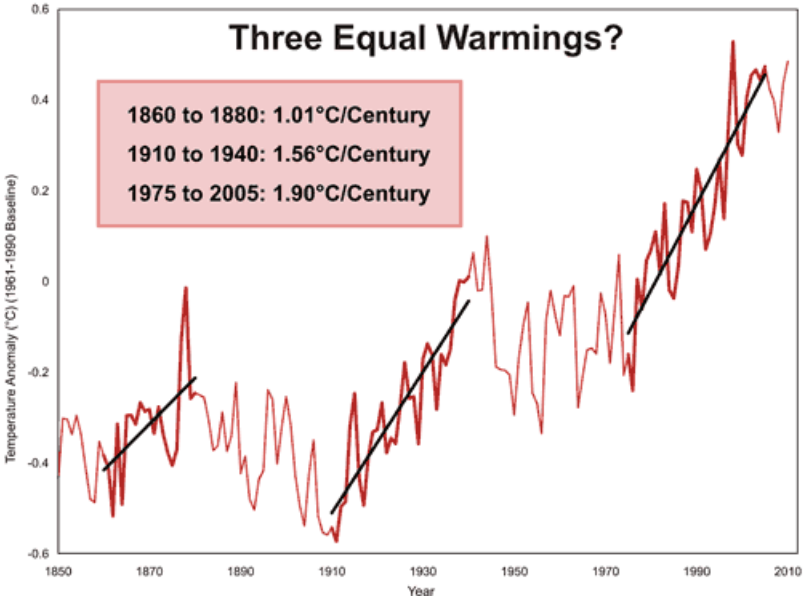
Climate Myth: It warmed just as fast in 1860-1880 and 1910-1940
"In fact, the *rate* of warming from *1975-2001, at 0.16 °C per decade*, *was the fastest rate to be sustained for more than a decade in the 160-year record*, but exactly the same rate occurred from 1860-1880 and again from 1910-1940, when we could not possibly have had anything to do with it." (Christopher Monckton)

Let's have a look at some warming rates of the periods of interest from several different temperature records:

Time Period	1860-1880	1910-1940	1975-2001	1975-2005
Hadley	1.01	1.56	1.78	1.9
GISS		1.15	1.63	1.82
NOAA		1.38	1.74	1.87
NCEP R1			1.26	1.62
NCEP TCR		0.98	1.36	1.49
ERA-40			1.64	
AMTI	0.44	1.27	1.56	1.76

Table 1: Rate of warming for given indices in °C/century.

First we can conclude that Monckton's statement that 1975-2001 was the fastest warming rate for longer than a decade is absolutely wrong as a much higher rate is demonstrated for 1975-2005 in row 5. Secondly, to compare the three periods in Table 2, the only index which covers that period is Hadley, making his 1.6°C per century number wrong for 1975-2001 as it is actually much higher at 1.78°C per century.



Based upon the evidence presented here, he cannot support his statement that 1860-1880 had a similar warming rate as it was demonstratively lower than the 1975-2001 warming rate and nearly half the 1975-2005 rate. Finally, regarding the 1910 to 1940 warm period, evidence presented here suggests that only 1 out of the 4 major indices indicates a rate of warming within 0.25°C per century and none within 0.2°C. His claim that the rates are similar is dubious at best.

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