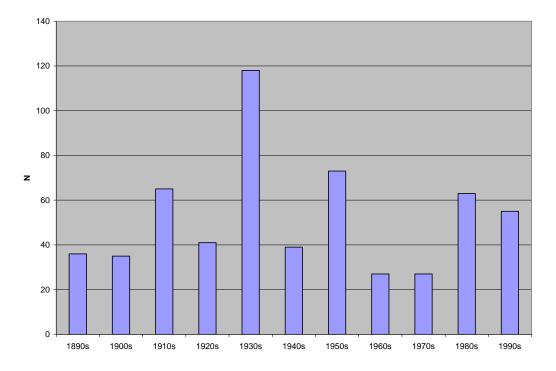
## Expanding on the work of Bruce Hall "Hall of Fame" blog.

By Peter McGurk, Senior Meteorologist WSI for Icecap

http://hallofrecord.blogspot.com/search?q=Temperature+Extremes

I took a look at how the state temperature extremes compared when stratifying the data by whether or not the record was set during the first half of the last century (1900-1949) or during the second half of the last century (1950-1999).

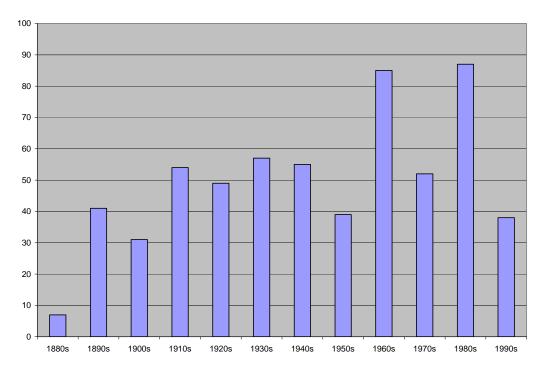
Looking at extreme state maximum temperatures, there were 298 recorded during the years from 1900 to 1949 while only 245 records were set during the period from 1950 to 1999. This in spite of the bias, noted by Hall, of listing only the most recent record location in the event of a tie.



## Monthly State Record Maxes by Decade

For extreme min temperatures, the data shows almost the exact opposite. Only 246 extreme record state low temperatures during the period from 1900-1949 while 301 extreme low state records were set during the period from 1950 to 1999.

## Extreme State Monthly Mins by Decade



If the data is further stratified by climatological seasons, we see that only during the winter have there been more record monthly highs set during the second half of the last century, while spring, summer and fall saw the majority of the state monthly record highs set during the first half of the 1900s.

Max	Winter	Spring	Summer	Fall
1900-1949	56	79	92	71
1950-1999	80	52	50	63
Min	Winter	Spring	Summer	Fall
1900-1949	69	57	56	64

For the minimum temperature extremes the situation is reverse. It is only during the winter season that there were more extreme record lows during the first half of the last century while the majority of monthly state record low temperatures occurring during the spring, summer and fall were set during the second half of the last century.

Additionally, we can look at the overall temperature average of all the state extreme temperatures stratified on a first half vs. second half of the past century.

	Max	1900-1949					Min	1900-1949			
			Std Dev(Max)	Range(Max)	Total T	Month		Mean(Min)	Std Dev(Min)	Range(Min)	Total T
Jan	19	82.7368	7.2942	27	1572		27	-42.1852	12.7823	52	-1139
Feb	17	88.8824	7.0346	25	1511		19	-42.9474	15.9355	57	-816
Mar	36	93.6944	6.0890	36	3373	Mar	20	-28.3000	15.1626	60	-566
Apr	16	99.8125	3.2294	13	1597		21	-10.9524	14.8138	47	-230
May	27	106.1111	4.9872	22	2865		16	12.5625	10.3728	38	201
Jun	29	109.2069	6.0023	32	3167	Jun	17	24.7059	8.4614	31	420
Jul	36	114.0278	6.5878	36	4105	Jul	20	30.7500	11.2665	37	615
Aug	27	112.8519	5.6684	20	3047	Aug	19	23.1579	10.6524	34	440
Sep	22	108.6818	5.7270	29	2391	Sep	21	10.1429	10.1798	40	213
Oct	28	99.1071	5.8711	27	2775	Oct	26	-5.5000	13.9578	58	-143
Nov	21	91.5238	6.3136	27	1922	Nov	17	-18.3529	16.8001	71	-312
Dec	20	81.9000	9.5416	36	1638	Dec	23	-33.0870	16.2562	58	-761
	298				29963		246				-2078
			1900-1949	Avg T	100.5470				1900-1949	Avg T	-8.4472
	Max	1950-1999					Min	1950-1999			
Month	N Rows	Mean(Max)	Std Dev(Max)	Range(Max)	Total T	Month	N Rows	Mean(Min)	Std Dev(Min)	Range(Min)	Total T
Jan	27	78.6667	9.4462	36	2124		22	-34.9091	20.8325	94	-768
Feb	26	82.6923	9.9590	34	2150		18	-37.8889	20.4878	85	-682
Mar	12	94.0000	6.9805	22	1128		27	-19.8889	19.1117	86	-537
Apr	27	99.3333	5.3205	31	2682		27	-3.3333	18.4349	74	-90
May	13	102.8462	6.2162	24	1337		32	10.0625	13.4090	59	322
Jun	19	111.9474	7.8703	27	2127		29	22.1034	11.0206	44	641
Jul	12	111.6667	7.5116	26	1340		25	28.6400	9.6647	38	716
Aug	19	110.2632	6.9028	29	2095		26	27.5000	9.9529	47	715
Sep	20	107.9500		28	2159		25	17.2800	13.1356	50	432
Oct	18	100.1667	8.3331	43	1803		22	3.9545	16.3459	69	87
Nov	25	87.7600	6.4632	35	2194		24	-14.1250	18.6462	76	-339
Dec	27	82.2593	7.4709	31	2221	Dec	24	-30.8333	21.2043	89	-740
	245				23360		301				-243
	1950-1999 Avg T		Ų	95.3469				1950-1999	Avg T	-0.8073	
	delta T (1900-1949 Avg minus 1950-1999 A				Avg T)				1949 Avg min	us 1950-1999	Avg T)
Jan	46	4.0702				Jan	49	-7.2761			
Feb	43	6.1900				Feb	37	-5.0585			
Mar	48	-0.3056				Mar	47	-8.4111			
Apr	43	0.4792				Apr	48	-7.6190			
May	40	3.2650				May	48	2.5000			
Jun	48	-2.7405				Jun	46	2.6024			
Jul	48	2.3611				Jul	45				
Aug	46	2.5887				Aug	45	-4.3421			
Sep	42	0.7318				Sep	46	-7.1371			
Oct	46	-1.0595				Oct	48	-9.4545			
Nov	46	3.7638				Nov	41	-4.2279			
Dec	47	-0.3593				Dec	47	-2.2536			

As far as extreme maxes are concerned, not only is the overall average greater during the first half of the last century, but 2/3 of the monthly averages are also greater during the period 1900-1949. Only for the months of March, June, October and December were they warmer during the period 1950-1999.

For the extreme mins, the first half of the 1900s was decidedly colder than the second half, in spite of the fact that the majority of the record mins occurred during the period 1950-1999. Only 1/3 of the months, May, June and July were the monthly averages cooler during the period 1950-1999.

I suspect that if we were truly headed for a Global Meltdown, that this data would vastly different than it is currently. Namely, we would be seeing many more record state maxes occurring more frequently during the recent past that the distant past. Additionally, we should not be seeing more state record extreme mins set during the second half of the past

century than the first half. Additionally, this extreme record data indicates that it is only during the winter months of December, January and February that there were more record maxes during the later half of the last century and more record mins during the first half of the 1900s. For 3 out of the four seasons there were more record maxes during the first half of the last century and more record mins during the second half of the 1900s. From an extreme state monthly record perspective, hardly a global Armageddon in the making.