

Did No Lights at Wrigley Hurt the Cubs?



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Notes provide additional information and were reminders during the presentation. They are not supposed to be anything close to a complete text of the presentation or thorough discussion of the subject.

Use Acrobat Reader's ability to enlarge what appears on the screen if you have trouble reading a graph or table.

All Day Games Until 8/9/88

- ⌘ Fewer night games than other teams
 - ☒ Some say still at a disadvantage
- ⌘ Day games wear down team
- ⌘ Disturbs players' "body clock"
- ⌘ Home game advantage?
- ⌘ Don Zminda in 6/87 *Sabermetric Review*
 - ☒ Looked at 1969-84 (ex. 1981) data
 - ☒ Rough estimate: cost 3.7 games a year

Since Chicago's summer weather usually does not stay very hot for more than a couple of days before cooling off, I have doubts about the first reason. Night games in St. Louis on Astroturf (and more recently in Kansas City, Arlington TX, and Miami) likely just as wearing.

Second reason—disruptions from going from all day game "life style" to mostly night games one and back—makes more sense to me. For that reason, visiting teams may have been at a disadvantage.

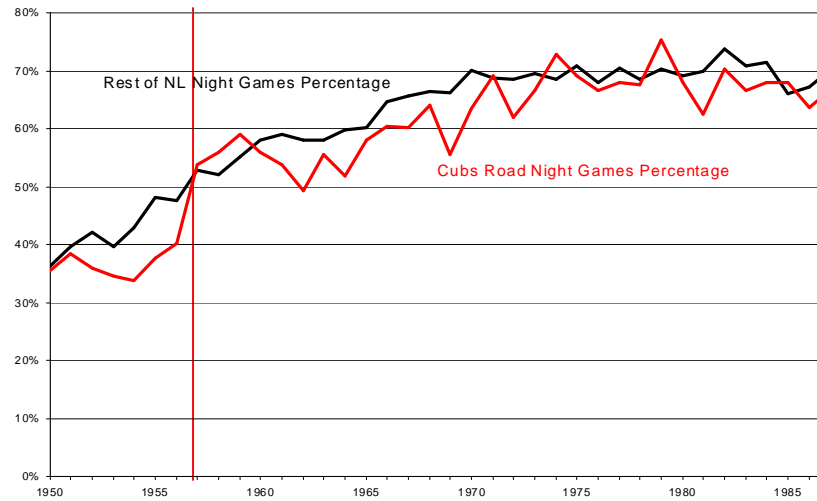
When I wrote proposal, I had not been able to find any serious analysis on the Internet, just speculation by "experts" and anecdotes, mostly from former players. Later found Don's article. Will look at some similar things and a lot more over a longer period. I won't try to estimate the effect because there are many other factors. Will be able to see how having night games now affects things.

Used 1950-2010 Data

- ⌘ All other NL teams had lights by then
- ⌘ Excluded strike years, 1981, 1994-95
- ⌘ Included 1972, played 156 games
- ⌘ Excluded 1988 when lights put up
- ⌘ Analysis based on 7 unequal year groups
- ⌘ Data from Retrosheet

It is possible that I could have started with 1949, but that almost certainly would not have made much, if any, difference.

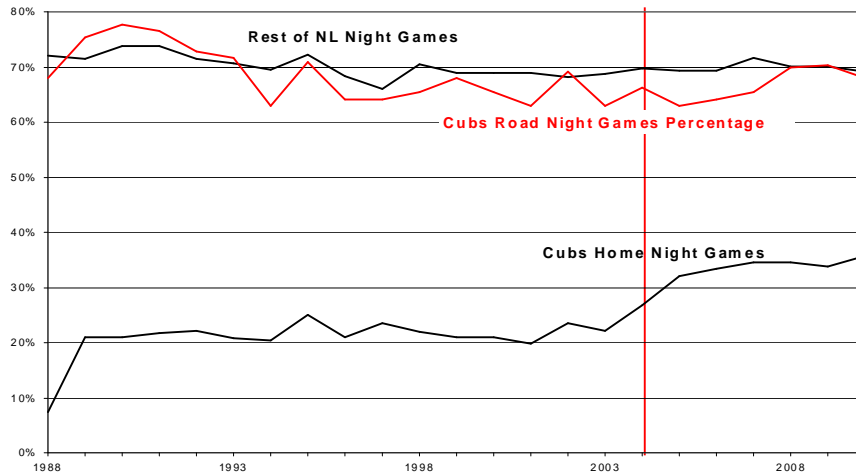
NL night game percent, 1950-87 (excluding Cubs)



Percentage grew steadily until 1970 and has leveled off at around 70% since then.

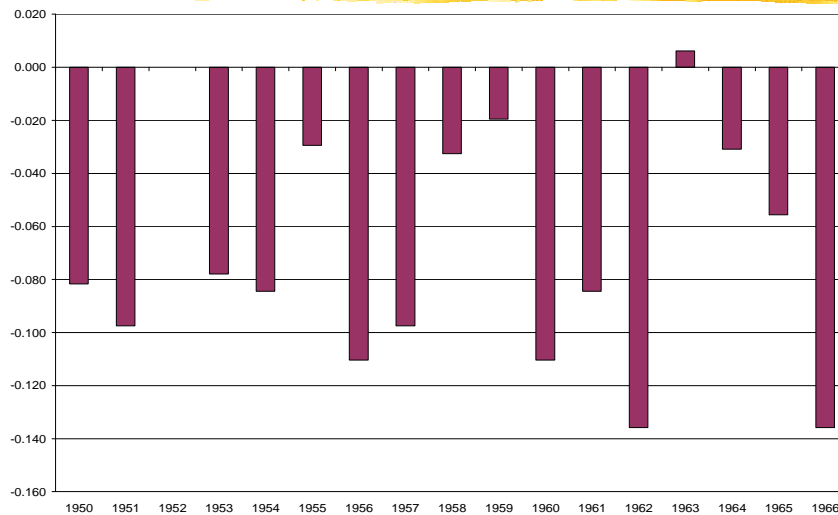
Chose 1956/1957 as a dividing line in determining groups of years because of crossing over 50%. Could have chosen other years, such as 1957/1958 when Dodgers and Giants moved to the west coast.

NL night game percent, 1988-2010



Top line is percentage for all other teams, and it stays right around 70%. Red line is Cubs percentage of night games on the road. Cubs played a little over 20% at night at home until 2000 when they started increasing gradually to the current of a little more than a third. Chose 2003/2004 as a group divider when they went about 25%. Could have chosen one a year later, but wanted the last group to be as large as feasible.

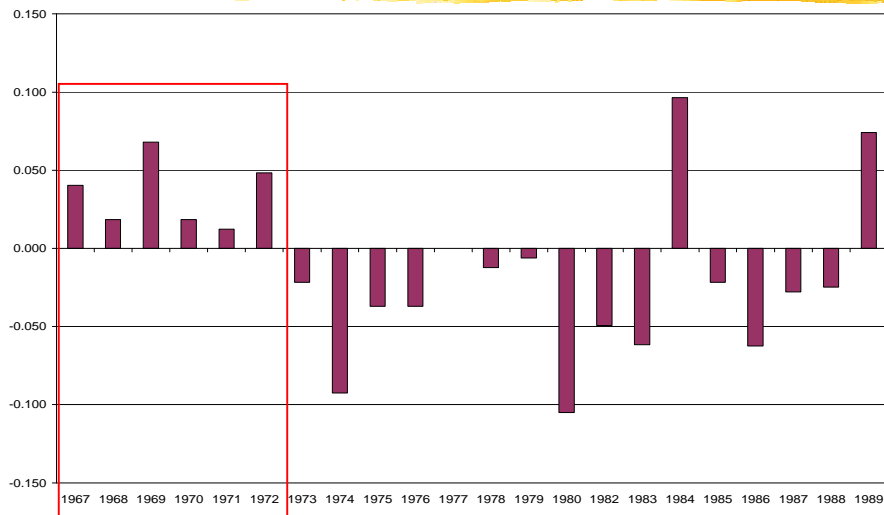
Cubs vs. 0.500, 1950-66



Shows Cubs season records as above or below 0.500, which gives a better idea of whether the team was good or bad than just showing the winning percentage.

Cubs were exactly 0.500 in 1952, so no bar there. Only winning season in this period was 1963, when they were just above.

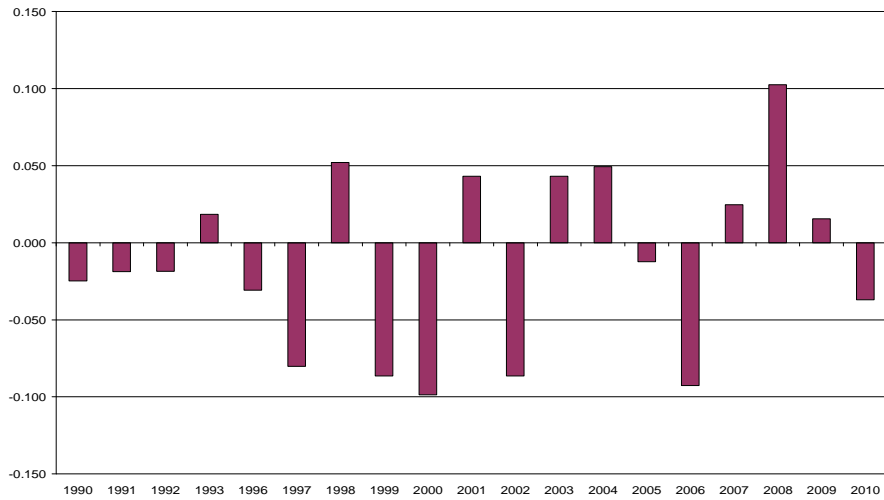
Cubs vs. 0.500, 1967-89



1967-73 were pretty good years on the north side. After that, team was generally a losing one except for division winning years in 1984 and 1989.

Note 1981 is excluded from the graph.

Cubs vs. 0.500, 1990-2010



1994-95 not in graph. Team has be good in some years and not so good in others.

Year groups in analysis

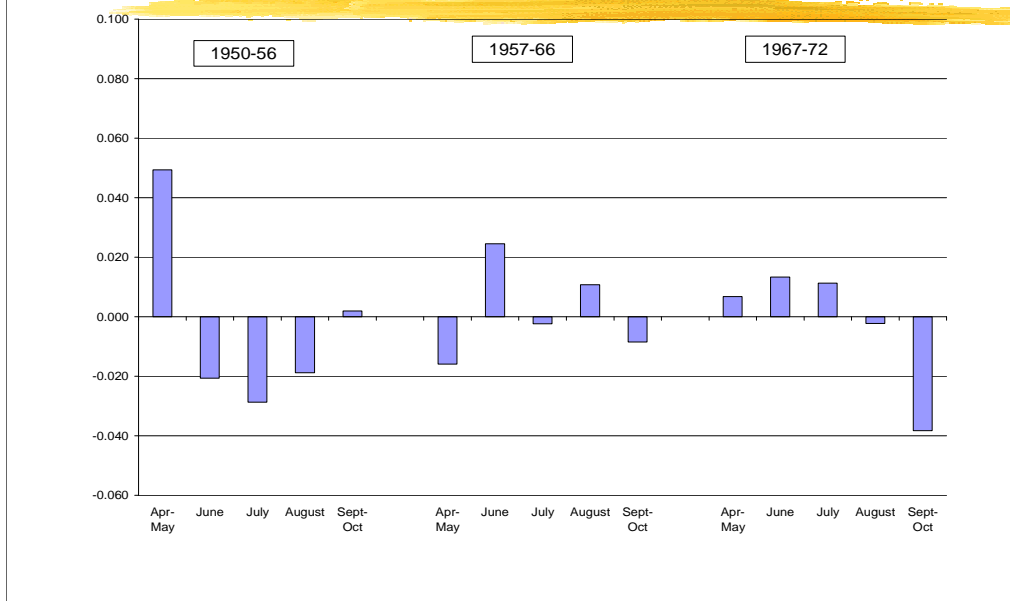
- ⌘ 1950-56, under 50% night games
- ⌘ 1957-66, bad Cubs teams
- ⌘ 1967-72, good Cubs teams
- ⌘ 1973-79, half of remaining day only years
- ⌘ 1980-87, half of remaining day only years
- ⌘ 1989-2003, under 25% night games
- ⌘ 2004-10, over 25% home night games

Cubs monthly performance

- ⌘ Compares winning percentage in month to whole season
- ⌘ Average for years in group
- ⌘ April and May combined since season started after mid-April in early years
- ⌘ Two graphs follow

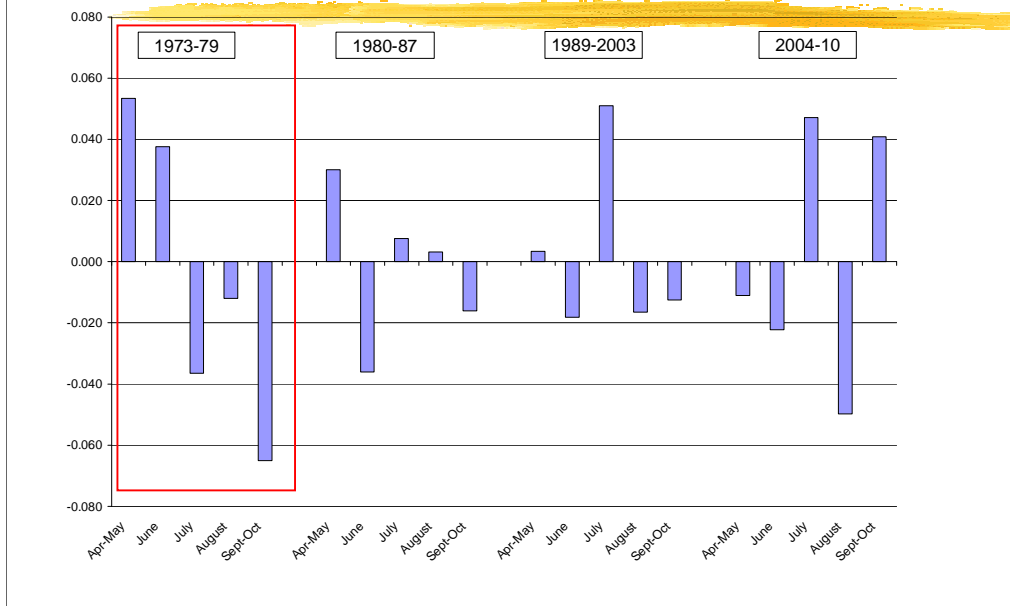
Want to see if drop off late in the season, which could be evidence of being ground down either by all the day games or having the normal “biorhythms” disturbed over the course of several months.

Cubs monthly, 1950-72



First three of the year groups. Bars compare the record for the month with the whole season record and averages over the years in the group. Most dramatic is the 1967-72 group in Sept.-Oct.. Almost all of that is due to the collapse in 1969. Rest of years in that group showed either a small drop off or a small increase in Sept.-Oct.

Cubs monthly, 1973-2010



Except for last group, Sept.-Oct. showed a drop off. Zminda using 1969-84 picked up most of what we see in last group on prior slide and first two groups on this one, which showed the strongest effects.

Note that last group, when the Cubs play more home night games shows an improvement in Sept., but a drop off in August. These patterns may not be all that meaningful due to the small number of years in (some of) the groups.

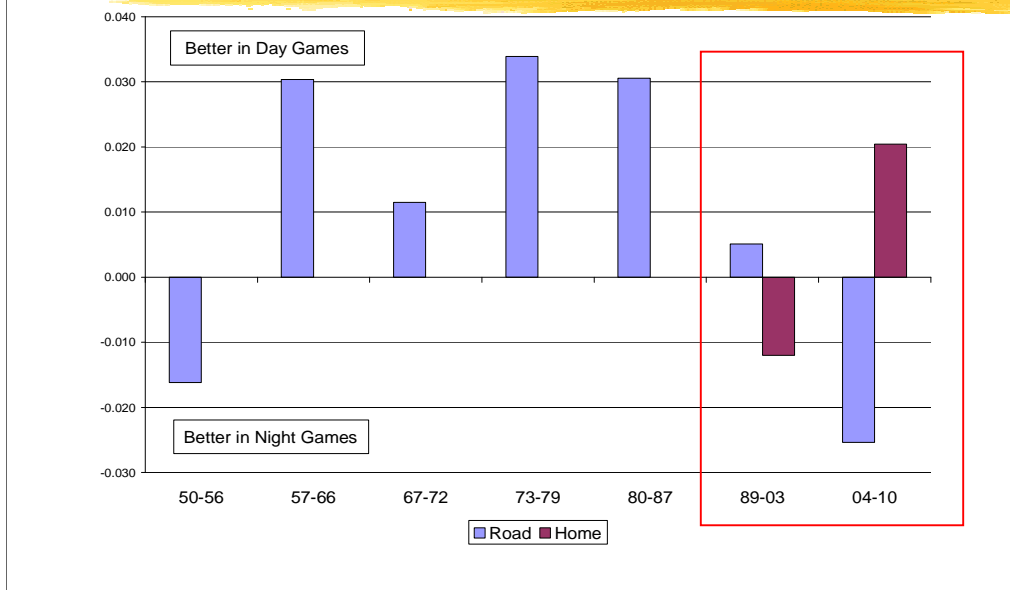
Cubs in Sept.-Oct.

- ⌘ Cubs did better in 1950-56 (less than half of road games at night)
- ⌘ Did better in 2004-10 (more home at night)
- ⌘ Worse in 1957-2003
- ⌘ Especially bad in 1969(.333), 1977(.300), 1979(.290), by otherwise decent teams

Some evidence that all or too many home day games had a cumulate negative effect.

Percentages shown for 1969, 1977, 1979 are winning percentages in Sept.-Oct. of those years.

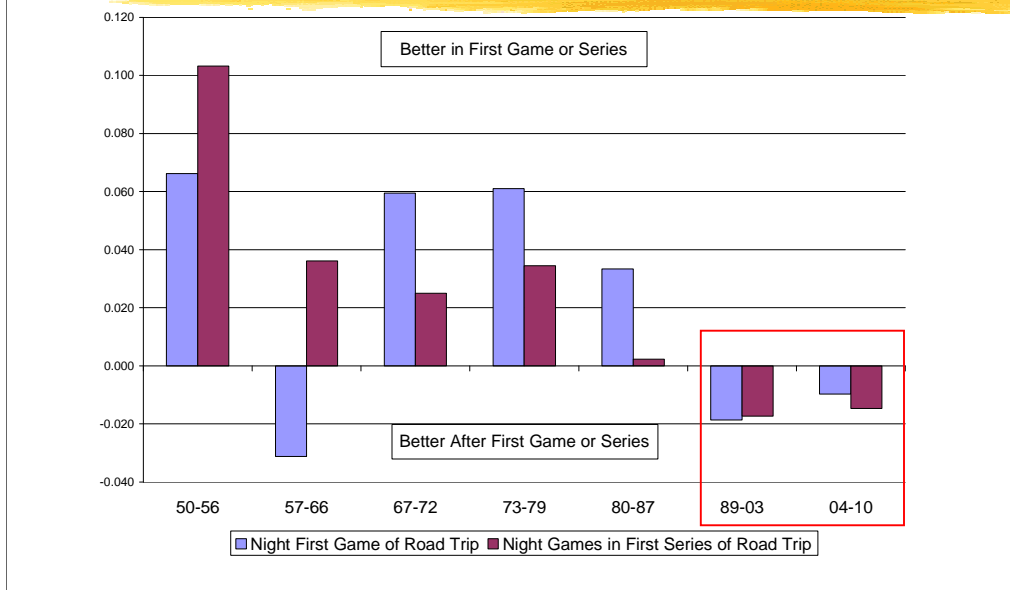
Cubs day vs. night pct.



Bars are winning percent in day games minus winning percent in night games averaged over the years in each group. Blue bars are for road games only, and red bars are for home games only (for the last two groups of years).

Once more than half of road games were a night, they did better in road day games than in night games. Pattern decreased once they started playing home games at night, and has reversed in the last seven years. 2004-10 pattern is “best” for team because the play better at night on the road when about 70% of the games are a night and better in the day at home when about 65% of the games are in the day.

Road trip night games: First of trip/1st series vs. rest



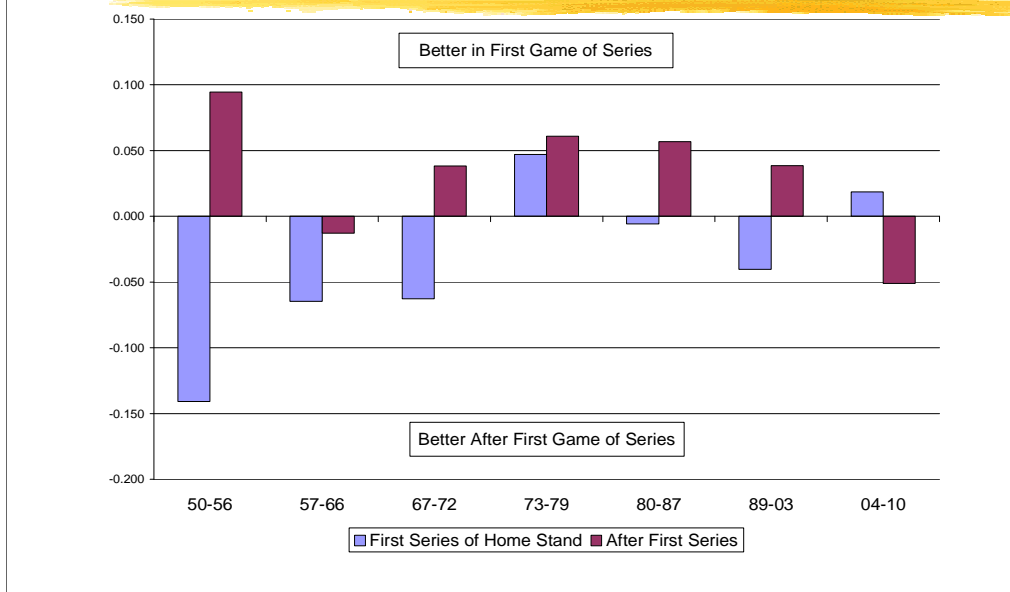
Want to see if the transition from playing all in the day to having night games affects how the team plays. By the second or later series of a road trip, the team should be adjusted (but I did not try to develop data about this). It seems like the negative effect should be the greatest if the first game of the road trip is at night and may continue for night games in the first series of the trip.

The blue bars look at cases where the first game of the road trip was at night, and the red bars look at all night games in the first series of the road trip. Bars going up mean the team was better in those first night games, and down means better after the first game or series.

The strongest effects—better early—were in 1950-56 when fewer than half of the road games were at night. Likely not much meaning. Interestingly, for 1958-87, the team was not hurt in early road trip night games, but things reversed in the years when Wrigley had lights.

Poorer road performance in night games does not seem to be due to the transition from all day games to road night games.

Cubs in first game of home series vs. rest of series



This chart tries to shed some light (possibly at night!) on a possible advantage the Cubs may have had because visiting teams were not yet acclimated to all day games when they came to Wrigley. My thinking is that any advantage is not likely to last more than a game. The bars compare how the Cubs did in the first games of their home series with how they did in the rest of the series. The blue bars are for the first series of the home stand when the Cubs might have the same transition effects as the visiting team.

Most consistent pattern is definite advantage in first games after the first series in 1967-2003. Not sure if “logic” can explain all this.

[Did not check patterns of other NL teams; perhaps this is typical ***
Possible additional research ***]

Other considerations

- ⌘ Age of Cubs teams
 - ☒ Did not investigate
 - ☒ Older players may be affected more
 - ☒ Editor's note to Zminda article: Cubs in 1969-84 were one of the oldest teams in NL
- ⌘ Days off before start of road trip
- ⌘ Distance if road/home next day
- ⌘ Especially hot years in Chicago

Did not try to incorporate any of these, which might account for some of the effects seen in the charts. Since some of these may be important, I don't feel I can estimate effects from not playing or playing relatively fewer night games.

Conclusions

- ⌘ All day games probably hurt Cubs on road and in night games
- ⌘ Likely advantage on home stands
- ⌘ Hard to quantify effects
- ⌘ Effects seem to be reduced or eliminated at current level of home night games

Should the Cubs play even more night games at home? Can't really answer, but it looks like increasing to about one third has reduced or eliminated the disadvantages that may be due to all or "too many" home day games.

Web sites, e-mail



www.pankin.com/baseball.htm

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Plan to post slides, notes on my web site

These slides and notes will also be posted on the Retrosheet Research page.