## New and Improved Power Ranking (NIPR)

Nipr $=\{$ all cats $\} ;$ Bopper $=\{r u n, h r, r b i, t b\} ;$ Pitchin $=\{w, s v, k, e r a, w h i p\}$

| Team | NIPR | NIPR <br> Rank |  | BOPPER | BOPPER <br> Rank | PITCHIN | PITCHIN <br> Rank |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | -44 | 12 | 58 | 5 | -120 | 14 |  |
| Boston Poindexters | 54 | 1 | 17 | 7 | 75 | 1 |  |
| CRYOGENIC TEDS | 18 | 5 | 68 | 4 | 5 | 8 |  |
| KGG Baseball 2019 | 3 | 7 | -28 | 9 | 22 | 4 |  |
| Killer Maltese | 8 | 6 | 51 | 6 | 1 | 11 |  |
| Killer Rabbits | -28 | 11 | -40 | 10 | -49 | 13 |  |
| Naperville Jellyfish | 32 | 4 | 143 | 1 | -37 | 12 |  |
| Notorious BE AR D | 1 | 8 | -6 | 8 | 28 | 3 |  |
| Plano Tiburon | -18 | 10 | -54 | 11 | 15 | 5 |  |
| PTBNL | -44 | 13 | -138 | 13 | 4 | 9 |  |
| RBI's all day | -64 | 14 | -147 | 14 | 6 | 6 |  |
| SATX Elephants | -9 | 9 | -101 | 12 | 43 | 2 |  |
| Southern Rockets | 53 | 2 | 86 | 3 | 3 | 10 |  |
| Vatican City Popes | 39 | 3 | 91 | 2 | 5 | 7 |  |

Week
15

## NIPR for Special Category Areas

NIPR-1 $=\{$ all cats except your worst $\} ; P Q U A L=\{$ era, whip $\} ; P Q U A N=\{$ win,sv, $k\}$

| Team | NIPR-1 | NIPR-1 Rank | PQUAL | PQUAL Rank | PQUAN | PQUAN Rank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | -23 | 12 | -89 | 12 | -141 | 14 |
| Boston Poindexters | 72 | 2 | 200 | 1 | -8 | 11 |
| CRYOGENIC TEDS | 33 | 5 | -31 | 8 | 29 | 5 |
| KGG Baseball 2019 | 9 | 8 | 38 | 5 | 12 | 8 |
| Killer Maltese | 23 | 6 | 11 | 7 | -6 | 10 |
| Killer Rabbits | -19 | 11 | -55 | 11 | -45 | 12 |
| Naperville Meerkats | 58 | 3 | -120 | 14 | 18 | 6 |
| Notorious BE AR D | 13 | 7 | 60 | 3 | 7 | 9 |
| Plano Tiburon | -4 | 10 | 18 | 6 | 12 | 7 |
| PTBNL | -32 | 13 | -115 | 13 | 83 | 1 |
| RBI's all day | -53 | 14 | -49 | 10 | 43 | 2 |
| SATX Elephants | 7 | 9 | 59 | 4 | 33 | 4 |
| Southern Rockets | 73 | 1 | 115 | 2 | -73 | 13 |
| Vatican City Popes | 50 | 4 | -41 | 9 | 36 | 3 |

## NIPR Category Data

Category Z-score * 100. Average is 0 . One stdev better than average is 100 . And 1 stdev worse is -100

| Team | Run | Hr | Rbi | Sb | Tb | w | Sv | K | Era | Whip | NIPR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | 125 | 60 | 29 | -74 | 19 | -186 | -2 | -235 | 4 | -181 | -44 |
| Boston Poindexters | 121 | -12 | -44 | 97 | 2 | 42 | -108 | 41 | 213 | 186 | 54 |
| CRYOGENIC TEDS | 18 | 84 | 87 | -120 | 85 | 118 | -8 | -23 | 18 | -80 | 18 |
| KGG Baseball 2019 | -50 | 32 | -44 | 31 | -50 | 23 | 10 | 2 | 82 | -6 | 3 |
| Killer Maltese | 3 | 96 | 29 | -127 | 74 | -72 | 147 | -93 | -42 | 63 | 8 |
| Killer Rabbits | -4 | -92 | -21 | 123 | -42 | -53 | 4 | -86 | -108 | -1 | -28 |
| Naperville Meerkats | 86 | 148 | 209 | -61 | 129 | 137 | -201 | 118 | -153 | -87 | 32 |
| Notorious BE AR D | -25 | 24 | -4 | -107 | -21 | 14 | -40 | 46 | 68 | 52 | 1 |
| Plano Tiburon | -140 | -24 | -44 | -35 | -9 | -81 | 85 | 34 | -44 | 80 | -18 |
| PTBNL | -136 | -124 | -133 | 90 | -160 | -43 | 197 | 95 | -121 | -109 | -44 |
| RBI's all day | -158 | -124 | -147 | -81 | -161 | 156 | -83 | 56 | -57 | -40 | -64 |
| SATX Elephants | -22 | -155 | -112 | 97 | -114 | 42 | -27 | 85 | 50 | 68 | -9 |
| Southern Rockets | 157 | -56 | 103 | 169 | 138 | -129 | 29 | -118 | 114 | 117 | 53 |
| Vatican City Popes | 25 | 140 | 92 | -2 | 109 | 33 | -2 | 78 | -22 | -61 | 39 |

## NIPR Explanation

May 2013
The goal of the NIPR is to give a statistical measure of a team's performance, independent of head-to-head weekly competition. The NIPR measures a team's statistical performance in each category (cat) over the whole season.

For each cat, the NIPR is a team's Z-score for that cat times 100 . I multiply by 100 , so that the NIPR is a whole number. The Z-score is the number of standard deviations either better or worse than average for a cat. An average performance gives a NIPR of 0 , no better or worse than average.

Example: Assume the league average is 9 homers per week and the stdev is 1
If Team $Z$ averages 9 homers per week, their NIPR is 0 .
If team X averages 10 homers per week, then their NIPR for homers is 100.
If Team Y averages 11 homers per week, their NIPR is 200
If Team DOP averages 8 homers per week, their NIPR is -100 .
Other NIPR scores are simply the averages over multiple categories:
NIPR = average(all cats)
NIPR-1 = average( all cats except team's worst)
BOPPER = average(run,hr,rbi,tb)
PQUAN=average(win,k)
PQUAL=average(era,whip)

