## 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 | $\begin{array}{c}\text { NIPR } \\ \text { Rank }\end{array}$ |  | BOPPER | $\begin{array}{c}\text { BOPPER } \\ \text { Rank }\end{array}$ | PITCHIN |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | \(\left.\begin{array}{c}PITCHIN <br>

Rank\end{array}\right]\)

Week

## 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 | -125 | 14 | -166 | 14 | -165 | 13 |
| Boston Poindexters | -7 | 10 | 9 | 8 | -172 | 14 |
| CRYOGENIC TEDS | -31 | 12 | -67 | 11 | 0 | 9 |
| KGG Baseball 2018 | 50 | 3 | 116 | 3 | 75 | 2 |
| Killer Maltese | 25 | 6 | 38 | 5 | 88 | 1 |
| Naperville Meerkats | 128 | 1 | 36 | 6 | 69 | 4 |
| Notorious BE AR D | 21 | 7 | -127 | 12 | 37 | 7 |
| Plano Tiburon | 7 | 8 | 98 | 4 | 40 | 6 |
| PTBNL | -25 | 11 | -13 | 9 | -12 | 10 |
| RBI's all day | 6 | 9 | 11 | 7 | 16 | 8 |
| San Antonio Kindness | 127 | 2 | 117 | 2 | 74 | 3 |
| Southern Rockets | 36 | 4 | 128 | 1 | -85 | 12 |
| Thomas's Okay Team | 30 | 5 | -44 | 10 | 67 | 5 |
| Vatican City Popes | -41 | 13 | -138 | 13 | -33 | 11 |

## 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 | -78 | -115 | -134 | -49 | -111 | -189 | -121 | -184 | -162 | -170 | -131 |
| Boston Poindexters | 95 | 62 | 18 | 8 | 50 | -164 | -202 | -150 | 21 | -4 | -27 |
| CRYOGENIC TEDS | -140 | 26 | 11 | -67 | -116 | 46 | -31 | -13 | -39 | -95 | -42 |
| KGG Baseball 2018 | -21 | -83 | -7 | -6 | 26 | 54 | 90 | 82 | 136 | 95 | 36 |
| Killer Maltese | -128 | 22 | 5 | -143 | -16 | 70 | 95 | 101 | 20 | 57 | 8 |
| Naperville Meerkats | 123 | 239 | 279 | -176 | 232 | 37 | 75 | 94 | 23 | 49 | 98 |
| Notorious BE AR D | 16 | 98 | 36 | -44 | 84 | -51 | 145 | 18 | -140 | -113 | 5 |
| Plano Tiburon | -58 | -65 | -67 | -67 | -107 | 54 | 45 | 22 | 120 | 76 | -5 |
| PTBNL | -126 | -61 | -84 | 64 | -96 | 86 | -142 | 19 | -48 | 22 | -37 |
| RBI's all day | -38 | -43 | 3 | 59 | -57 | 29 | 45 | -27 | 9 | 13 | -1 |
| San Antonio Kindness | 162 | 109 | 107 | 196 | 79 | 142 | -31 | 112 | 92 | 143 | 111 |
| Southern Rockets | 41 | -7 | -57 | 116 | 60 | -76 | -11 | -169 | 136 | 120 | 15 |
| Thomas's Okay Team | 114 | -76 | -56 | 59 | 38 | 70 | 65 | 66 | -35 | -52 | 19 |
| Vatican City Popes | 38 | -105 | -52 | 50 | -67 | -108 | -21 | 29 | -132 | -143 | -51 |

## 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)

