## 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
18

## 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 | -112 | 14 | -156 | 14 | -148 | 13 |
| Boston Poindexters | -9 | 10 | 6 | 8 | -184 | 14 |
| CRYOGENIC TEDS | -22 | 11 | -103 | 12 | 4 | 9 |
| KGG Baseball 2018 | 39 | 4 | 123 | 3 | 59 | 5 |
| Killer Maltese | 7 | 9 | 13 | 6 | 81 | 1 |
| Naperville Meerkats | 119 | 1 | 8 | 7 | 55 | 6 |
| Notorious BE AR D | 16 | 7 | -97 | 11 | 45 | 7 |
| Plano Tiburon | 18 | 6 | 137 | 1 | 62 | 4 |
| PTBNL | -31 | 12 | -48 | 10 | -18 | 10 |
| RBI's all day | 11 | 8 | 15 | 5 | 6 | 8 |
| San Antonio Kindness | 115 | 2 | 110 | 4 | 71 | 2 |
| Southern Rockets | 48 | 3 | 125 | 2 | -81 | 12 |
| Thomas's Okay Team | 38 | 5 | -8 | 9 | 71 | 3 |
| Vatican City Popes | -32 | 13 | -125 | 13 | -23 | 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 | -38 | -107 | -120 | -53 | -108 | -172 | -100 | -172 | -134 | -178 | -118 |
| Boston Poindexters | 125 | 70 | 16 | -19 | 56 | -182 | -213 | -158 | 18 | -6 | -29 |
| CRYOGENIC TEDS | -115 | 53 | 46 | -38 | -79 | 46 | -21 | -13 | -80 | -126 | -33 |
| KGG Baseball 2018 | -25 | -119 | -36 | -24 | 12 | 18 | 103 | 57 | 140 | 107 | 23 |
| Killer Maltese | -174 | 8 | -44 | -121 | -50 | 84 | 64 | 96 | -9 | 35 | -11 |
| Naperville Meerkats | 118 | 238 | 279 | -165 | 255 | 18 | 64 | 84 | -7 | 22 | 90 |
| Notorious BE AR D | -45 | 99 | 46 | -63 | 57 | -49 | 154 | 30 | -109 | -84 | 4 |
| Plano Tiburon | -77 | -58 | -72 | -102 | -95 | 84 | 52 | 48 | 162 | 111 | 6 |
| PTBNL | -94 | -45 | -93 | 69 | -103 | 56 | -140 | 29 | -97 | 0 | -42 |
| RBI's all day | -28 | -21 | 16 | 79 | -45 | 37 | 30 | -50 | 13 | 17 | 5 |
| San Antonio Kindness | 111 | 78 | 99 | 191 | 59 | 160 | -60 | 114 | 94 | 126 | 97 |
| Southern Rockets | 111 | -8 | -44 | 108 | 87 | -77 | 7 | -172 | 126 | 123 | 26 |
| Thomas's Okay Team | 114 | -103 | -54 | 64 | 25 | 65 | 69 | 78 | -3 | -14 | 24 |
| Vatican City Popes | 17 | -86 | -38 | 74 | -70 | -87 | -10 | 28 | -114 | -136 | -42 |

## 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)

