## 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
19

## 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 | -19 | 11 | -55 | 10 | -139 | 14 |
| Boston Poindexters | 87 | 1 | 259 | 1 | -17 | 11 |
| CRYOGENIC TEDS | 44 | 5 | -26 | 8 | 19 | 5 |
| KGG Baseball 2019 | 2 | 8 | -25 | 7 | 9 | 8 |
| Killer Maltese | 28 | 6 | -46 | 9 | 2 | 9 |
| Killer Rabbits | -23 | 12 | -12 | 6 | -47 | 12 |
| Naperville Meerkats | 70 | 2 | -92 | 14 | 35 | 3 |
| Notorious BE AR D | -14 | 10 | -1 | 5 | -6 | 10 |
| Plano Tiburon | -10 | 9 | 29 | 4 | 12 | 7 |
| PTBNL | -27 | 13 | -69 | 13 | 72 | 1 |
| RBI's all day | -59 | 14 | -67 | 12 | 19 | 6 |
| SATX Elephants | 14 | 7 | 49 | 3 | 31 | 4 |
| Southern Rockets | 68 | 3 | 121 | 2 | -51 | 13 |
| Vatican City Popes | 46 | 4 | -65 | 11 | 62 | 2 |

## 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 | 114 | 29 | 23 | -61 | 12 | -180 | 2 | -240 | -6 | -103 | -41 |
| Boston Poindexters | 164 | -7 | -49 | 85 | 18 | 36 | -108 | 21 | 260 | 257 | 68 |
| CRYOGENIC TEDS | 28 | 123 | 133 | -140 | 103 | 105 | -19 | -27 | 25 | -77 | 25 |
| KGG Baseball 2019 | -78 | 44 | 4 | 56 | -65 | 27 | 23 | -25 | 7 | -56 | -6 |
| Killer Maltese | 31 | 137 | 67 | -129 | 108 | -85 | 154 | -64 | -86 | -7 | 13 |
| Killer Rabbits | -13 | -93 | -58 | 113 | -86 | -85 | 39 | -94 | -64 | 40 | -30 |
| Naperville Meerkats | 71 | 152 | 201 | -56 | 132 | 191 | -213 | 127 | -135 | -50 | 42 |
| Notorious BE AR D | -31 | -18 | -23 | -84 | -37 | -25 | -24 | 31 | 39 | -41 | -21 |
| Plano Tiburon | -164 | -47 | -56 | -44 | -38 | -76 | 65 | 47 | -13 | 71 | -26 |
| PTBNL | -137 | -122 | -128 | 62 | -150 | -42 | 181 | 78 | -63 | -76 | -40 |
| RBI's all day | -133 | -104 | -159 | -73 | -144 | 105 | -87 | 38 | -69 | -66 | -69 |
| SATX Elephants | 18 | -126 | -86 | 85 | -79 | 36 | -24 | 81 | 22 | 77 | 0 |
| Southern Rockets | 108 | -75 | 69 | 197 | 128 | -85 | 28 | -96 | 135 | 107 | 52 |
| Vatican City Popes | 21 | 108 | 61 | -11 | 99 | 79 | -19 | 125 | -53 | -77 | 33 |

## 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)

