## 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 | -15 | 11 | -75 | 11 | -137 | 14 |
| Boston Poindexters | 87 | 1 | 230 | 1 | -6 | 11 |
| CRYOGENIC TEDS | 45 | 4 | -4 | 7 | 28 | 6 |
| KGG Baseball 2019 | 1 | 8 | 23 | 6 | 14 | 8 |
| Killer Maltese | 16 | 7 | -20 | 8 | -5 | 10 |
| Killer Rabbits | -17 | 12 | -21 | 9 | -49 | 12 |
| Naperville Meerkats | 63 | 3 | -99 | 13 | 30 | 3 |
| Notorious BE AR D | -1 | 9 | 37 | 4 | -0 | 9 |
| Plano Tiburon | -4 | 10 | 24 | 5 | 24 | 7 |
| PTBNL | -34 | 13 | -111 | 14 | 81 | 1 |
| RBI's all day | -54 | 14 | -48 | 10 | 37 | 2 |
| SATX Elephants | 21 | 6 | 60 | 3 | 29 | 5 |
| Southern Rockets | 67 | 2 | 101 | 2 | -74 | 13 |
| Vatican City Popes | 40 | 5 | -97 | 12 | 29 | 4 |

## 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 | 117 | 61 | 36 | -65 | 39 | -179 | 3 | -235 | 11 | -161 | -37 |
| Boston Poindexters | 147 | 1 | -32 | 85 | 27 | 53 | -115 | 44 | 234 | 225 | 67 |
| CRYOGENIC TEDS | 26 | 104 | 107 | -122 | 93 | 121 | -8 | -29 | 54 | -62 | 28 |
| KGG Baseball 2019 | -68 | 13 | -74 | 47 | -87 | 34 | 15 | -6 | 62 | -16 | -8 |
| Killer Maltese | 11 | 97 | 20 | -128 | 69 | -63 | 134 | -85 | -61 | 20 | 1 |
| Killer Rabbits | -14 | -94 | -36 | 123 | -40 | -63 | 9 | -94 | -56 | 14 | -25 |
| Naperville Meerkats | 68 | 152 | 202 | -72 | 125 | 169 | -204 | 124 | -135 | -62 | 37 |
| Notorious BE AR D | -38 | 9 | -14 | -109 | -37 | -5 | -32 | 36 | 60 | 13 | -12 |
| Plano Tiburon | -135 | -38 | -63 | -28 | -30 | -73 | 92 | 52 | -31 | 80 | -17 |
| PTBNL | -141 | -133 | -124 | 73 | -170 | -44 | 199 | 88 | -118 | -103 | -47 |
| RBI's all day | -163 | -121 | -144 | -84 | -154 | 131 | -80 | 59 | -57 | -39 | -65 |
| SATX Elephants | 26 | -137 | -81 | 110 | -74 | 34 | -26 | 79 | 33 | 87 | 5 |
| Southern Rockets | 126 | -50 | 121 | 166 | 135 | -131 | 21 | -113 | 103 | 98 | 48 |
| Vatican City Popes | 38 | 136 | 83 | 4 | 105 | 15 | -8 | 81 | -98 | -95 | 26 |

## 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)

