## 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 17

## 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 | -4 | 9 | -54 | 11 | -134 | 14 |
| Boston Poindexters | 87 | 1 | 234 | 1 | -15 | 11 |
| CRYOGENIC TEDS | 48 | 4 | -14 | 8 | 26 | 6 |
| KGG Baseball 2019 | -5 | 10 | 4 | 5 | 8 | 8 |
| Killer Maltese | 23 | 6 | -8 | 7 | 5 | 9 |
| Killer Rabbits | -20 | 12 | -22 | 9 | -48 | 12 |
| Naperville Meerkats | 61 | 2 | -101 | 13 | 32 | 5 |
| Notorious BE AR D | -0 | 8 | 51 | 4 | 1 | 10 |
| Plano Tiburon | -10 | 11 | 1 | 6 | 17 | 7 |
| PTBNL | -43 | 13 | -133 | 14 | 73 | 1 |
| RBI's all day | -49 | 14 | -40 | 10 | 36 | 3 |
| SATX Elephants | 22 | 7 | 76 | 3 | 33 | 4 |
| Southern Rockets | 57 | 3 | 93 | 2 | -72 | 13 |
| Vatican City Popes | 47 | 5 | -87 | 12 | 40 | 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 | 127 | 66 | 58 | -63 | 46 | -169 | 4 | -236 | 10 | -118 | -28 |
| Boston Poindexters | 154 | 13 | -29 | 81 | 28 | 32 | -111 | 34 | 231 | 236 | 67 |
| CRYOGENIC TEDS | 28 | 115 | 133 | -135 | 110 | 118 | -14 | -27 | 39 | -67 | 30 |
| KGG Baseball 2019 | -72 | 20 | -70 | 45 | -77 | 23 | 15 | -15 | 43 | -36 | -12 |
| Killer Maltese | 7 | 100 | 30 | -129 | 69 | -54 | 142 | -73 | -48 | 32 | 8 |
| Killer Rabbits | -5 | -97 | -50 | 117 | -54 | -73 | 21 | -93 | -67 | 22 | -28 |
| Naperville Meerkats | 61 | 146 | 192 | -75 | 122 | 185 | -209 | 119 | -141 | -61 | 34 |
| Notorious BE AR D | -41 | 1 | -31 | -105 | -35 | -6 | -25 | 34 | 78 | 24 | -11 |
| Plano Tiburon | -141 | -33 | -47 | -21 | -37 | -83 | 84 | 48 | -42 | 45 | -23 |
| PTBNL | -147 | -139 | -127 | 75 | -174 | -54 | 193 | 79 | -126 | -140 | -56 |
| RBI's all day | -153 | -113 | -145 | -69 | -146 | 128 | -82 | 64 | -45 | -35 | -60 |
| SATX Elephants | 22 | -135 | -86 | 87 | -78 | 32 | -19 | 85 | 44 | 109 | 6 |
| Southern Rockets | 100 | -67 | 94 | 183 | 116 | -121 | 21 | -116 | 108 | 78 | 40 |
| Vatican City Popes | 61 | 123 | 78 | 15 | 111 | 42 | -19 | 97 | -84 | -89 | 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)

