## 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
15

## 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 |  | PQUAL |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |
| NIPR-1 | Rank |  |  |  |

## 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 | 11 | -100 | -126 | -46 | -101 | -137 | -102 | -158 | -38 | -188 | -98 |
| Boston Poindexters | 134 | 85 | 32 | -51 | 86 | -172 | -213 | -151 | 11 | 1 | -24 |
| CRYOGENIC TEDS | -82 | 80 | 93 | -46 | -27 | 50 | -40 | -2 | -69 | -123 | -17 |
| KGG Baseball 2018 | 20 | -110 | -8 | -28 | 61 | 3 | 98 | 59 | 158 | 111 | 36 |
| Killer Maltese | -246 | 6 | -80 | -116 | -80 | 120 | 71 | 93 | 36 | 90 | -11 |
| Naperville Meerkats | 134 | 238 | 260 | -164 | 265 | -43 | 77 | 68 | -0 | 25 | 86 |
| Notorious BE AR D | -3 | 101 | 47 | -63 | 94 | -8 | 160 | 38 | -96 | -62 | 21 |
| Plano Tiburon | -113 | -58 | -52 | -87 | -94 | 108 | 29 | 79 | 190 | 144 | 15 |
| PTBNL | -16 | -26 | -67 | 114 | -67 | 27 | -130 | -1 | -155 | -16 | -34 |
| RBI's all day | -42 | -5 | 27 | 102 | -50 | 3 | 22 | -67 | -44 | -19 | -7 |
| San Antonio Kindness | 55 | 37 | 71 | 179 | 20 | 155 | -61 | 110 | 75 | 92 | 73 |
| Southern Rockets | 28 | -95 | -93 | 67 | 2 | -113 | 36 | -184 | 69 | 103 | -18 |
| Thomas's Okay Team | 77 | -105 | -67 | 90 | -50 | 85 | 57 | 74 | -12 | -51 | 10 |
| Vatican City Popes | 42 | -47 | -38 | 49 | -59 | -78 | -5 | 41 | -124 | -107 | -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)

