## 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 8

## 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 | Pank |  |  |  |

## 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 | -63 | -34 | -133 | -53 | -50 | -86 | -103 | -131 | 57 | -43 | -64 |
| Boston Poindexters | 215 | 36 | 7 | -27 | 35 | -139 | -172 | -153 | -39 | -11 | -25 |
| CRYOGENIC TEDS | -194 | 1 | 19 | 33 | -80 | 3 | -34 | -7 | -58 | -100 | -42 |
| KGG Baseball 2018 | 30 | -86 | -57 | -1 | 44 | -15 | 105 | -12 | 64 | 83 | 15 |
| Killer Maltese | -117 | 54 | 3 | -113 | -50 | 214 | 63 | 99 | 108 | 118 | 38 |
| Naperville Meerkats | 84 | 211 | 283 | -164 | 289 | 3 | 8 | 91 | 129 | 165 | 110 |
| Notorious BE AR D | -24 | 97 | 55 | -70 | 90 | 38 | 202 | 30 | 9 | -65 | 36 |
| Plano Tiburon | 37 | 10 | -41 | -104 | -16 | 144 | 22 | 116 | 148 | 116 | 43 |
| PTBNL | 7 | 10 | -93 | 67 | -34 | 20 | -158 | -6 | -161 | -93 | -44 |
| RBI's all day | 30 | 106 | 71 | 76 | 49 | 3 | -47 | -57 | -38 | -107 | 8 |
| San Antonio Kindness | 53 | -60 | -5 | 231 | -64 | 55 | 63 | 109 | 8 | 7 | 40 |
| Southern Rockets | -47 | -139 | -49 | 59 | -48 | -156 | 22 | -189 | 6 | 106 | -43 |
| Thomas's Okay Team | 76 | -165 | -85 | 50 | -70 | 3 | 22 | 64 | -39 | -38 | -18 |
| Vatican City Popes | -86 | -42 | 27 | 16 | -96 | -86 | 8 | 46 | -196 | -139 | -55 |

## 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)

