## 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 | NIPR <br> Rank |  | BOPPER | BOPPER <br> Rank | PITCHIN | PITCHIN <br> Rank |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | -37 | 11 | -19 | 6 | -50 | 10 |  |
| Boston Poindexters | -22 | 9 | 93 | 2 | -110 | 14 |  |
| CRYOGENIC TEDS | -54 | 14 | -98 | 14 | -34 | 9 |  |
| KGG Baseball 2018 | 5 | 6 | -46 | 11 | 46 | 5 |  |
| Killer Maltese | 39 | 3 | -27 | 7 | 120 | 1 |  |
| Naperville Meerkats | 97 | 1 | 214 | 1 | 55 | 3 |  |
| Notorious BE AR D | 47 | 2 | 68 | 3 | 53 | 4 |  |
| Plano Tiburon | 33 | 5 | -6 | 5 | 93 | 2 |  |
| PTBNL | -42 | 12 | -28 | 8 | -78 | 13 |  |
| RBI's all day | -8 | 7 | 42 | 4 | -61 | 11 |  |
| San Antonio Kindness | 34 | 4 | -33 | 9 | 46 | 6 |  |
| Southern Rockets | -16 | 8 | -49 | 12 | -9 | 8 |  |
| Thomas's Okay Team | -24 | 10 | -68 | 13 | 3 | 7 |  |
| Vatican City Popes | -53 | 13 | -44 | 10 | -73 | 12 |  |

Week 7

## 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 | 33 | -11 | -112 | -44 | 12 | -42 | -137 | -123 | 72 | -20 | -37 |
| Boston Poindexters | 209 | 56 | 32 | -44 | 76 | -124 | -154 | -149 | -65 | -60 | -22 |
| CRYOGENIC TEDS | -227 | -21 | -40 | 20 | -106 | 19 | -18 | -3 | -64 | -103 | -54 |
| KGG Baseball 2018 | -26 | -98 | -68 | 2 | 8 | -1 | 101 | -8 | 49 | 92 | 5 |
| Killer Maltese | -135 | 47 | 16 | -100 | -35 | 223 | 50 | 111 | 96 | 119 | 39 |
| Naperville Meerkats | 92 | 210 | 284 | -155 | 271 | -42 | 33 | 59 | 115 | 108 | 97 |
| Notorious BE AR D | -26 | 124 | 60 | -63 | 112 | 60 | 186 | 36 | 26 | -44 | 47 |
| Plano Tiburon | 41 | 27 | -40 | -109 | -51 | 162 | -1 | 86 | 117 | 100 | 33 |
| PTBNL | 16 | -1 | -88 | 85 | -38 | -1 | -154 | -8 | -158 | -70 | -42 |
| RBI's all day | -9 | 76 | 76 | 58 | 26 | -1 | -69 | -60 | -62 | -114 | -8 |
| San Antonio Kindness | 16 | -78 | -4 | 243 | -65 | -1 | 84 | 117 | 13 | 18 | 34 |
| Southern Rockets | 16 | -126 | -40 | 76 | -44 | -144 | 50 | -201 | 88 | 162 | -16 |
| Thomas's Okay Team | 41 | -155 | -92 | 20 | -67 | -1 | -1 | 85 | -29 | -38 | -24 |
| Vatican City Popes | -42 | -49 | 16 | 11 | -99 | -103 | 33 | 57 | -200 | -151 | -53 |

## 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)

