## 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 | -75 | 14 | -139 | 14 | -31 | 9 |  |
| Boston Poindexters | 6 | 6 | 107 | 2 | -63 | 12 |  |
| CRYOGENIC TEDS | -23 | 10 | -31 | 8 | -32 | 11 |  |
| KGG Baseball 2018 | -30 | 12 | -113 | 13 | 44 | 3 |  |
| Killer Maltese | 92 | 1 | 71 | 4 | 147 | 1 |  |
| Naperville Meerkats | 69 | 2 | 155 | 1 | 32 | 5 |  |
| Notorious BE AR D | 34 | 3 | 81 | 3 | 22 | 7 |  |
| Plano Tiburon | 6 | 5 | -37 | 9 | 64 | 2 |  |
| PTBNL | -20 | 9 | 21 | 7 | -85 | 13 |  |
| RBI's all day | -7 | 7 | 25 | 5 | -31 | 10 |  |
| San Antonio Kindness | 14 | 4 | -61 | 12 | 36 | 4 |  |
| Southern Rockets | -24 | 11 | -57 | 11 | -27 | 8 |  |
| Thomas's Okay Team | -7 | 8 | -46 | 10 | 25 | 6 |  |
| Vatican City Popes | -37 | 13 | 25 | 6 | -101 | 14 |  |

Week 4

## 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 | -65 | 14 | 8 | 8 | -56 | 11 |
| Boston Poindexters | 24 | 5 | -11 | 10 | -98 | 14 |
| CRYOGENIC TEDS | -15 | 13 | -52 | 11 | -19 | 9 |
| KGG Baseball 2018 | -12 | 11 | 82 | 3 | 18 | 5 |
| Killer Maltese | 113 | 1 | 136 | 1 | 154 | 1 |
| Naperville Meerkats | 87 | 2 | 66 | 4 | 10 | 7 |
| Notorious BE AR D | 53 | 3 | -113 | 13 | 113 | 2 |
| Plano Tiburon | 19 | 6 | 86 | 2 | 49 | 3 |
| PTBNL | -8 | 10 | -88 | 12 | -84 | 13 |
| RBI's all day | 3 | 8 | 5 | 9 | -54 | 10 |
| San Antonio Kindness | 28 | 4 | 38 | 7 | 35 | 4 |
| Southern Rockets | -4 | 9 | 45 | 5 | -75 | 12 |
| Thomas's Okay Team | 6 | 7 | 41 | 6 | 15 | 6 |
| Vatican City Popes | -12 | 12 | -242 | 14 | -7 | 8 |

## 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 | -134 | -121 | -162 | -38 | -137 | -7 | -56 | -105 | 43 | -26 | -75 |
| Boston Poindexters | 191 | 66 | 62 | -51 | 108 | -34 | -159 | -103 | 6 | -28 | 6 |
| CRYOGENIC TEDS | -92 | -4 | 12 | 55 | -41 | -7 | -22 | -26 | -40 | -64 | -23 |
| KGG Baseball 2018 | -194 | -98 | -89 | -65 | -73 | 19 | 46 | -11 | 85 | 78 | -30 |
| Killer Maltese | -23 | 125 | 121 | -105 | 63 | 281 | 46 | 135 | 121 | 151 | 92 |
| Naperville Meerkats | 62 | 137 | 208 | -92 | 215 | -86 | 81 | 35 | 49 | 82 | 69 |
| Notorious BE AR D | 2 | 125 | 62 | -92 | 135 | 71 | 217 | 50 | -92 | -135 | 34 |
| Plano Tiburon | -32 | 54 | -89 | -105 | -83 | 71 | -56 | 132 | 104 | 68 | 6 |
| PTBNL | 88 | 8 | -52 | 149 | 39 | -60 | -125 | -67 | -106 | -69 | -20 |
| RBI's all day | -23 | 90 | 44 | -11 | -12 | -7 | -90 | -65 | -5 | 14 | -7 |
| San Antonio Kindness | -40 | -110 | 3 | 202 | -97 | -34 | 46 | 94 | 42 | 34 | 14 |
| Southern Rockets | 45 | -110 | -89 | 122 | -73 | -139 | 115 | -202 | -0 | 91 | -24 |
| Thomas's Okay Team | 54 | -121 | -84 | -11 | -33 | 19 | -22 | 48 | 52 | 29 | -7 |
| Vatican City Popes | 96 | -39 | 53 | 42 | -12 | -86 | -22 | 86 | -259 | -225 | -37 |

## 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)

