## **Data Dictionary**

| Field Name | Data Type | Description   | Example           |
|------------|-----------|---|-------------------|
| Tm         | Text      | Team Name   | Toronto Blue Jays |
| Year       | Integer   | Calendar Year   | 2021              |
| #Bat       | Integer   | Number of Players used in Games                       | 62                |
| BatAge     | Float     | Batter's Average Age                                  | 26.8              |
| G          | Integer   | Games Played or Pitched                               | 162               |
| PA         | Float     | Plate Appearance (per game)                           | 37.469            |
| PA         | riuat     | Each completed turn batting, regardless of the result | 37.409            |
|            |           | At Bats (per game)                                    |                   |
| AB         | Float     | Any Plate Appearance that results in a hit, error,    | 33.802            |
|            |           | fielder's choice, or a non-sacrifice out              |                   |
| R/G        | Float     | Runs Scored (per game)                                | 5.22              |
| Н          | Float     | Hits (per game)                                       | 8.981             |
| 2B         | Float     | Doubles Hit (per game)                                | 1.759             |
| 3B         | Float     | Triples Hit (per game)                                | 0.080             |
| HR         | Float     | Home Runs Hit (per game)                              | 1.617             |
| RBI        | Float     | Runs Batted In (per game)                             | 5.037             |
| SB         | Float     | Stolen Bases (per game)                               | 0.5               |
| CS         | Float     | Caught Stealing (per game)                            | 0.123             |
| ВВ         | Float     | Bases on Balls/Walks (per game)                       | 3.062             |
| SO         | Float     | Strikeouts by Batter (per game)                       | 7.519             |
| DA         | Γlaat     | Batting Average                                       | 0.266             |
| ВА         | Float     | H/AB  | 0.266             |
| ОВР        | Float     | On Base Percentage                                    | 0.33              |
| ОБР        | Ποαι      | (H + BB + HBP)/(At Bats + BB + HBP + SF)              | 0.55              |
| SLG        | Float     | Slugging Percentage                                   | 0.466             |
| SLG        | riuat     | (1B + 2*2B + 3*3B + 4*HR)/AB                          | 0.400             |
| OPS        | Float     | On Base plus Slugging Percentage                      | 0.797             |
| Ol 3       | Ποατ      | OBP + SLG   | 0.737             |
| OPS+       | Integer   | OPS Adjusted to the player's ballpark(s)              | 113               |
| 0131       | integer   | 100*[OBP/lg OBP + SLG/lg SLG - 1]                     | 113               |
| ТВ         | Float     | Total Bases (per game)                                | 15.753            |
| 10         | riout     | Singles + 2 x Doubles + 3 x Triples + 4 x Home Runs.  | 13.733            |
| GDP        | Float     | Double plays grounded into (per game)                 | 0.691             |
| НВР        | Float     | Times a Batter was Hit by a Pitch (per game)          | 0.315             |
| SH         | Float     | Sacrifice Hits (per game)                             | 0.062             |
| SF         | Float     | Sacrifice Flies (per game)                            | 0.216             |
| IBB        | Float     | Intentional Bases on Balls (per game)                 | 0.086             |
| LOB        | Float     | Runners Left On Base by Batters (per game)            | 6.519             |
| #P         | Integer   | Number of Pitchers used in Games                      | 38                |
| PAge       | Float     | Pitchers' average age                                 | 29.1              |
| RA/G       | Float     | Runs Allowed (per game)                               | 4.09              |
| ERA        | Float     | Earned Run Average                                    | 3.91              |
| 2101       | 11000     | 9 * ER / IP   | 3.31              |
|            |           |   |                   |

| GF     | Float   | Games Finished (per game)   | 0.994  |
|--------|---------|---|--------|
| CG     | Float   | Complete Game (per game)  | 0.006  |
| tSho   | Integer | Shutouts by a team  | 14     |
|        | ege.    | No runs allowed in a game by one or more pitchers.  |        |
| cSho   | Integer | Shutouts  | 1      |
|        |         | No runs allowed and a complete game.  |        |
| SV     | Float   | Saves (per game)  | 0.210  |
| IP     | Float   | Innings Pitched (per game)  | 8.673  |
| H_P    | Float   | Hits Allowed (per game)   | 7.759  |
| R      | Float   | Runs Allowed (per game)   | 4.093  |
| ER     | Float   | Earned Runs Allowed (per game)  | 3.765  |
| HR_P   | Float   | Home Runs Allowed (per game)  | 1.290  |
| BB_P   | Float   | Bases on Balls/Walks Allowed (per game)   | 2.920  |
| IBB_P  | Float   | Intentional Bases on Balls/Walks Allowed (per game)   | 0.062  |
| SO_P   | Float   | Strikeouts by Pitcher (per game)  | 9.062  |
| HBP_P  | Float   | Times a Pitcher hit a Batter (per game)   | 0.463  |
| BK     | Float   | Balks (per game)  | 0.025  |
| WP     | Float   | Wild Pitches (per game)   | 0.333  |
| BF     | Float   | Batters Faced (per game)  | 36.519 |
| ERA+   | Integer | ERA Adjusted to the player's ballpark(s)  100*[IgERA/ERA]   | 115    |
| FIP    | Float   | Fielding Independent Pitching measures a pitcher's effectiveness at preventing HR, BB, HBP and causing strikeout  (13*HR + 3*(BB+HBP) - 2*SO)/IP + Constant <sub>ig</sub> | 4.18   |
| WHIP   | Float   | Walks and Hits Per Innings Pitched (BB + H)/IP  | 1.231  |
| Н9     | Float   | Hits Per 9 Innings 9 x H / IP   | 8.1    |
| HR9    | Float   | Home Runs Per 9 Innings   | 1.3    |
| BB9    | Float   | Bases on Balls/Walks Per 9 Innings  | 3      |
| SO9    | Float   | Strikeouts Per 9 Innings  | 9.4    |
| SO/W   | Float   | Strikeout to Walk Ratio SO / BB   | 3.1    |
| LOB_P  | Float   | Runners Left On Base by Pitchers (per game)   | 6.506  |
| #Fld   | Integer | Number of Players used as Fielders  | 61     |
| RA/G_D | Float   | Runs Allowed Per Game by the Defense  | 4.09   |
| DefEff | Float   | Defensive Efficiency  | 0.7    |
| GS     | Float   | Games Started   | 9      |
| CG_D   | Float   | Complete Game by Defense (per game)   | 6.463  |
| Inn    | Float   | Innings Played in Field (per game)  | 78.074 |
|        | Hout    | Defensive Chances (per game)  | 70.074 |
| Ch     | Float   | Putouts + Assists + Errors  | 35.043 |
| PO     | Float   | Putouts (per game)  | 26.025 |
| Α      | Float   | Assists (per game)  | 8.463  |
| E      | Float   | Errors Committed (per game)   | 0.556  |
|        |         |   |        |

| DP      | Float   | Double Plays Turned (per game)   | 0.753 |
|---------|---------|--|-------|
| Fld%    | Float   | Fielding Percentage (Putouts + Assists) / (Putouts + Assists + Errors) | 0.984 |
| Rtot    | Integer | Total Zone Total Fielding Runs Above Avg                               | 8     |
| Rtot/yr | Integer | Total Zone Total Fielding Runs Above Avg per 1,200<br>Inn              | 1     |
| W-L%    | Float   | Win-Loss Percentage Wins / (Wins + Losses)                             | 0.562 |