# Understanding Georgia Milestones Classroom Data Files

*Governor's Office of Student Achievement*

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# After This Training:

– You will be able to:

  – Navigate a Georgia Milestones classroom data file, and understand what you are examining.

  – Possess a greater knowledge of what indicators should be examined in order to clear a classroom, or signal the need for a greater in-depth analysis of that classroom.

  – Understand how to utilize the data file in classroom inquiries and/or rigorous investigations of flagged classrooms within your district.

# Columns A thru F:

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| SystemName | SchoolName | Grade | Content | TeacherName | N_Students |
| Any District | Georgia Elem | 3 | LA | Jim Smith | 20 |

Listed above are the school system, school name, subject tested, teacher of record, and the number of students within the testing class. The teacher of record may not be the name on the data file but is the name submitted to DRC by the school district for each class.

# Columns G and H/Columns W and X:

| G | H |
|---|---|
| N_ERA | Mean_ERA |
| 124 | 6.2 |

| W | X |
|---|---|
| N_WTR | Mean_WTR |
| 68 | 3.4 |

Column G is the total number of answers changed within a classroom. Column H is the average number of answers changed per student in the classroom.

Column W is the total number of wrong to right (WTR) answers in a given classroom. Column X is the average number of WTRs per student in a classroom.

# Columns J and K/Columns Z and AA:

| J | K |
|---|---|
| Min_ERA | Max_ERA |
| 0 | 20 |

| Z | AA |
|---|---|
| Min_WTR | Max_WTR |
| 0 | 9 |

Column J represents the lowest number of answers changed by at least one student in the classroom. Column K represents the greatest number of answers changed by at least one student in the classroom. Both numbers can possibly represent more than one student.
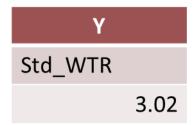
Column Z represents the lowest number of WTR answers changed by at least one student in the classroom.  Column AA represents the greatest number of WTR answers changed by at least one student in the classroom.  Both numbers can possibly represent more than one student.

# Column I and Column Y:

| I |
|---|
| Std_ERA |
| 6.17 |

Column I is the total erasure standard deviation value of the given classroom.

| Y |
|---|
| Std_WTR |
| 3.02 |

Column Y is the WTR standard deviation value of the given classroom.

# Columns L thru S:

| L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|
| P10_ERA | P25_ERA | P50_ERA | P75_ERA | P90_ERA | P95_ERA | P95_ERA | P99_9_ERA |
| 0.5 | 1.5 | 4 | 10 | 17 | 18.5 | 20 | 20 |

These columns provide the number of erasures at important percentile thresholds and are helpful to identify outliers in a class. For the purposes of the erasure analysis, it is often easiest to think about percentiles in reverse. In other words, if the 25th percentile for a class is 1.5, then this means that 75% of the class had 1.5 or more erasures. In contrast, referring to column P, 90th percentile, means that 10% of the classroom had 17 or more erasures.

# Columns AB thru AI:

| AB | AC | AD | AE | AF | AG | AH | AI |
|---|---|---|---|---|---|---|---|
| P10_WTR | P25_WTR | P50_WTR | P75_WTR | P90_WTR | P95_WTR | P95_WTR | P99_9_WTR |
| 0 | 1 | 2.5 | 5.5 | 8.5 | 9 | 9 | 9 |

These columns provide the same information as the prior slide but for WTR erasures and are helpful to identify outliers in a class. If the 25th percentile is 1, then 75% of the class had at least 1 wrong-to-right erasure. At the 90th percentile, 10% of the class had at least 8.5 wrong-to-right erasures on the test. Comparing these numbers to the state average can be quite valuable for anyone examining the data in question.

# **Columns U and V: (always in red)**

| U | V |
|---|---|
| Z_ERA | Flag_3SD_ERA |
| 7.396 | F |

Column U represents how many standard deviations a given classroom is above the state average.  The standard deviation is a measure of how much variation or "dispersion" exists from the state average (mean or expected value). A low standard deviation indicates that the data points tend to be very close to the state average; high standard deviation indicates that the data points are spread out over a large range of values from the state average.

Column V is the flagged column.  The class above was flagged for erasures, as such, there is an F in the column to denote the class was flagged for high erasures.

# Columns AK and AL: (always in red)

| AK | AL |
|---|---|
| Z_WTR | Flag_3SD_WTR |
| 5.00 | F |

These columns can be read in much the same way as columns U and V, except these columns provide data for WTR erasures. Column AK represents how many standard deviations a given classroom is above the state average.

Column AL tells us if the classroom was officially flagged by the State. The class above was flagged. An "F" appearing in this column signals a flagged classroom for high WTR erasures compared to the state average.

# Column AM:

| AM |
|---|
| corr_class |
| .844107 |

This column gives a classroom's correlation coefficient of the total number of erasures and the WTR erasures within the same flagged classroom. This class had a correlation of 0.84. The higher the correlation is (for example: over 0.90), the stronger the relationship between total erasures and WTR erasures. It is important to remember that correlation does not equal causation.

# Indicators

–Column AK is the primary indicator for how serious a flag is within a classroom and the extent to which an in-depth examination of a flagged classroom is needed.

–Examining the ratio of WTR erasures to total erasures is important to consider. Some classes can be flagged for high WTRs even though the total erasures are significantly higher. When a high percentage of erasure changes are from wrong to right, this is an indicator that further inquiry is warranted.

–The number of students in a classroom can affect its flagged status. Smaller classes are more affected by individual students with high erasures. Conversely, large classrooms, particular those where multiple classrooms were submitted under one teacher's name, are often outliers due to the large count of erasures.

# Indicators

–Column AA indicates the highest number of WTR erasures by a single student in the classroom.  A student with a high number of WTR erasures should be examined to determine the reason for the outlier  (e.g., off-track, misbubbled, small-group, etc.)

–Column Z indicates the lowest number of WTR erasures by a single student in the classroom.  Classrooms with a number other than zero in this column indicates every student in the classroom had at least one w-t-r erasure, which is typically an outlier.

*All indicators only serve to inform a direction for investigation.  Deeper analysis and other sources of information are essential in determining the reason(s) for a classroom being flagged.*

# Questions?

**Contact Information**
Dave Greenstein
Academic Auditor
dgreenstein@georgia.gov
404-844-8534