**Data Analysis Rubric**

Use this rubric to provide basic expectations for the data analysis students conduct and present.

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| **🡻Category**  **Rating🡺** | **4 (best)** | **3** | **2** | **1** |
| Individual Group Sample Data Analysis  (time plot) | Representation of individual sample including titles, appropriate scale, and statistical analysis (mean, median, standard deviation). | Student provides a graphical representation for individual data. Representation is missing titles, scales, or statistical analysis. | Student provides statistical analysis of individual sample only. | No graphical representation or statistical analysis. |
| Group Data Analysis (multiple time plots) | Representation of the average temperature for the group samples including titles, appropriate scale, and statistical analysis (mean, median, standard deviation). Representation shows the group data and each individual sample. | Representation of the average temperature for the group samples including titles, appropriate scale, and statistical analysis (mean, median, standard deviation). | Student provides a graphical representation for group average data. Representation is missing titles, scales, or statistical analysis. | No graphical representation or statistical analysis. |
| Group Data Analysis (multiple box plots) | Representation of statistical analysis for each sample taken. | Representation of statistical analysis of group averages. | Provided statistical analysis in words only. | No statistical analysis. |
| Sensor Accuracy | Students use the data to calculate the accuracy of the sensors used in the experiment. |  |  | Accuracy measurement not given. |