

MUDAC 2024 Rubric

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| Participant Team ID: | |
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| Judge Team ID: | |
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| Category | Score: 4 (Superior) | Score: 3 | Score: 2 | Score: 1 (Emerging) |
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| Prediction Accuracy Weight: 15% | The total distance between the predicted locations and the optimal locations will be computed for each team. The accuracy of a team's prediction will be scored as follows. $Score = 2 + \left(2 * \frac{(Total\ Distance - Worst\ Prediction)}{(Best\ Prediction - Worst\ Prediction)} \right)$ Note: The worst submitted prediction that is valid will receive a score of 2; the best submitted prediction will receive a score of 4; the remaining predictions will receive a score that is linearly interpolated between 2 and 4. If a prediction is not submitted or if a team submits an invalid prediction, then the team will receive a score of 1 for prediction accuracy. | | | No or invalid GPS coordinates were submitted |
| Completeness and breadth in providing insights to the client Weight: 30% | The outcomes provided were insightful, actionable, and thought provoking; Crop production, fertilizer use, soil quality, and other factors were thoroughly investigated | The outcomes provided were insightful and actionable; Crop production and fertilizer use were thoroughly investigated | The outcomes provided limited insight, but do appear to be actionable; Some of the important variables were not investigated | The outcomes provided limited insight and do not appear to be actionable; Most of the important variables were not investigated |
| Effectiveness of analytical procedures used / Evidence of correct curation of data Weight: 20% | The analytical procedures applied were appropriate and correct which led to a thorough and advanced understanding of the client's problem; The data appeared to be correctly curated | The analytical procedures applied were mostly appropriate and mostly correct which led to a sufficient understanding of the client's problem; The data appeared to be correctly curated | Some of the analytical procedures were not applied appropriately or were incorrect which led to a limited understanding of the client's problem; Some of the data did not appear to be correctly curated | Most of the analytical procedures used were not appropriate or serious mistakes were made which led to an incorrect understanding of the client's problem; Most of the data did not appear to be correctly curated |
| Creativity & Innovation Weight: 15% | Creative/original methods were used in the analysis and discussion of results; Outcomes were feasible and provided substantial value to the client | Creative/original methods were used in the analysis and discussion of results; Outcomes were feasible, but provided little value to the client | Limited creativity/originality was used in the analysis and discussion of results; Outcomes were conventional and provided little value to the client | The analysis and discussion of results were not creative/original; Outcomes were conventional and not valuable to the client |

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| Communication of Outcomes Weight: 15% | The description of the methods used and the discussion of outcomes were complete and were conveyed in a detailed manner that was easily understood | The description of the methods used and the discussion of outcomes were complete and conveyed in a manner that was ultimately understood | The description of the methods used and/or the discussion of outcomes were at times incomplete or difficult to understand | The description of the methods used and the discussion of outcomes were incomplete and consistently difficult to follow and understand |
| Team synergy Weight: 5% | All team members participated equally in the presentation and discussions; Team synergy was demonstrated | All team members participated in the presentation and discussions, though not equally; Team synergy was demonstrated | Some team members participated in the presentation and discussions; Some team synergy was demonstrated | Only one team member participated in the presentation and discussions; Little to no team synergy was demonstrated |

Comments: