

ENGL 221 Case Study

Meeting Notes – Experiment's Conclusion

You: Okay team, let's talk findings, meanings, and impacts. What are our most important findings, what conclusions can we draw from them, and what recommendations should we make?

Leslie: Well, our objective was to investigate RSSI differences between dish and dipole antenna to find the best fit for the GEOS mission.

Geoff: Absolutely. We also wanted to test the relationship between RSSI values and various distances, pitches, and headings for each antenna type.

Leslie: Great call, and it was really easy to run virtually.

You: Excellent. And what about meaningful findings? What are the takeaway messages here?

Lucas: Our results conclusively demonstrate that RSSI is inversely proportional to the distance between transmitter and receiver.

Barbara: That's right, Lucas. Our experiments also evidence an optimal, overlapping zone of headings and pitches in which the RSSI remains nearly constant. But, outside of that zone, RSSI values plummet. This gives us a good picture of the optimal ranges of operation for the comm array. We need to make sure those tables and graphs are clearly explained.

Geoff: And it might seem small, but our experiments and findings also demonstrate the Friss Equation as a useful means of modeling the relationships we're studying. I think this is an important detail as reference for future researchers.

Barbara: I agree.

Lucas: In terms of application, our work conclusively demonstrates that antennae shape and distance are significant factors influencing antenna performance. Given GEOS satellite mission parameters, we can recommend dish type receivers with confidence.

Barbara: I think it's really important that we describe the optimal zone of antenna operation, as well. The engineers are going to need to know the optimal range of operations.

Leslie: I agree.

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Geoff: Absolutely!

You: Okay, really strong work team. It sounds like we've got consensus on what's important about our work, and what we can recommend based on it. Thank you, everyone. I'll contact you if I need any more details on this one.

