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Thermal Systems

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EXPERIMENTAL INVESTIGATION OF A DRAFTING CYCLIST IN CROSS-WIND ABSTRACT COMPARISON

Although I have read many abstracts and written a few as part of research I have participated in, this assignment was interesting to understand the similarities and differences to what I would write, and what a professional would write. I was pleasured to see that my abstract was fairly similar, and also shows where I over-extended the information the reader needs. Both abstracts included the introduction to what we currently understand in draft effects, (how much energy is used to overcome drag and what a cyclist can save by riding behind another). We both introduced what an echelon was for the reader, which is an important concept for the rider. We both state that this research fills a gap in our understanding in wake effects on an athlete, and presents the certain parameters used to create different data for an echelon configuration (which is why it was published!). We also both presented similar final data to entice the reader to learn more on how the data was obtained.

I included, I thought, a more enticing conclusion to hold the reader for future papers that might come out to further the overall results that can be obtained in this research (more than 2 dynamic bodies). I also included wording that suggested that this research setup can easily be applied to other dynamic races we see (trucks, cars, running, etc.) The author added the specific scale of the 3D model used and explained the importance of understanding side force more than me, which I should have done. We both did not include any error analysis, which was a significant talking point in the results section of the paper. When talking about drag research (which is known for uncertainties and unpredictability), it could be important to tell the reader what this research estimates for overall error. I have only read a few abstracts that told the science-minded reader about the error, which might mean that it is not a common practice to include in the abstract.