*Based on this Figure, answer the following questions on Blackboard individually:*

1. *A. Based on the plot, explain whether for this model and data set you would also reach the conclusion that human participants are efficient.*

A: The model can be used to determine whether interleaving before the  
chunk boundary was required in order to reach the tipping point in the trade-off  
curve. Specifically, it might have been possible to achieve the observed RMSE  
lateral deviation by returning attention to steering control only once while dialling, at the chunk boundary, and dedicating a lot of time to steering control at  
this point. To test this idea, Figure 4 highlights the performance of a “chunk interleaving  
only” strategy with varying time given up to steering control. It can  
be seen that even when substantial periods of time were given up to steering  
control (up to 5 seconds), RMSE lateral deviation never reached the tipping point  
in the trade-off curve, nor, did performance fall within the 95% confidence  
intervals (CIs) of the human data from the steering‐focus condition. Moreover, of  
the 586 strategies that fell within the 95% CIs of the human data, all but one of  
these strategies performed a steering update before the chunk boundary. Taken  
together, this modelling analysis suggests that participants had to interleave  
tasks more often than that allowed by the chunk boundary in the dialling task to  
meet the performance objective of minimizing vehicle lateral deviation while  
dialling.

1. *B. Another argument in Janssen & Brumby (2010) is that in the steering focus condition people do not always interleave solely at the natural breakpoint (i.e., not solely in between digits 5 and 6). The Figure highlights the strategies that only interleave at the chunk boundary with a cross. Explain, based on this model result, whether you agree with this statement: “In the steering-focus condition, people only interleave at the chunk boundary”.*

B: Again, substantial periods of time were given up to steering control (up to 5 seconds), and unlike in the original model do some chunk interleaving only strategies coincide more closely with the trade-off curve and did their performance fall within the 95% confidence intervals (CIs) of the human data from the steering‐focus condition. More specifically, of the total amount of strategies that fell within the 95% CIs of the human data, three strategies (one tied to the mean value and two other falls within 95% CIs) performed a steering update in the chunk boundary. Therefore, it could be concluded that “in the steering-focus condition, people [might] only interleave at the chunk boundary”.