

Sept. 6, 1983

## Diesel Engine Problem - questions I would want answered

1. How does a diesel engine work?
2. What do each of the variables (4 indep + 1 dep) represent? Why are they important?
3. How are the variables measured?
4. What is the degree of precision in the measurements?
5. Why are there no observations at 2000 rpm and 30° inj timing?
6. How were the values for the independent variables selected?
7. Why do the largest alcohol values occur with the smaller loads?
8. How was the experiment conducted?
9. What was the run order?
10. Were all of the settings changed for every run?
11. Why were the temperature and pressure data included?
12. What conclusions have been reached from prior experimentation of this type?
13. The performance at load 70 appears qualitatively different. Why?  
Does the engine undergo some sort of change between load 60 and load 70, particularly at 2000 RPM?
14. Do the results for load 70 at 2000 RPM and 24° inj timing make sense?
15. Is there any basis for selecting either delay or log(delay) as the dependent variable?
16. How will the results (equation) be used?  
and if possible
17. Can I see the engine?
18. Can I see the engine in operation?