PROC REG contains an amazing number of options for making a regression analysis more useful. It is the purpose of this tutorial to explore a number of these features by illustrating their use on an example data set.

The options presented are:

1. A review of the "basic" output of PROC REG
2. The TEST statement
3. The RESTRICT statement, comparing results to the equivalent TEST
4. The NOINT option, and a comparison of results with the equivalent RESTRICT statement
5. Outlier detection, including the use of the OUTPUT option
6. Influential and leverage observations
7. Leverage plots
8. Detection and study of multicollinearity-the variance inflation factors
9. COLLIN and COLLINOINT
10. Estimating with one data set and predicting to another.

The tutorial is in the form of a set of transparencies which are not suitable for reproduction in the Proceedings. Copies of the originals are available from the author.

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