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# THE STATA JOURNAL

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## Stata tip 19: A way to leaner, faster graphs

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If you have many variables, consider doing a **preserve** of the data and **dropping** several of them before drawing a graph. This greatly speeds up production.

Take plotting fitted values from a model as an example. If there are many tied observations at each value of the predictor and therefore many replicates of the fitted values, the size of the graph file can be large, also making the plotting time large. A construction like this can save resources:

```
. preserve  
. bysort x: drop if _n > 1  
. line f1 f2 f3 x, sort clp(1 - _) saving(graph, replace)  
. restore
```

Here is another real example: with 15,156 variables and 50 observations, I wanted a **dotplot** of variable **v15155** by **v15156**. The time taken with all data present was 10.66 seconds, but with **preserve** and all irrelevant variables **dropped**, it was 0.69 seconds.