

17.871
Spring 2004
STATA demonstration handout
February 12, 2004

Files, etc. we will return to

I. MIT Server locker with data: `/mit/course_number/Examples`

A. To access the first time: (at the MIT Server prompt)

```
attach course_number  
cd /mit/course_number/Examples
```

B. To access after you've typed the "attach" command:

```
cd /mit/course_number/Examples
```

II. Within the MIT Server locker with the examples are the following files that are used in lecture:

File	Description
<code>black_officials.dat</code>	Raw data file. The data are ordered as follows: state name, % black elected officials, % population African-American, dummy variable for southern state. The data are "free form"
<code>black_officials.do</code>	STATA "do" file that records the commands necessary to set up <code>black_officials.dat</code> for analysis
<code>black_officials.dta</code>	STATA "data" file that saves data in binary form for easy re-use
<code>black_officials_no_space.dat</code>	Raw data file. The data are ordered the same as in <code>black_officials.dat</code> , except they are in "fixed format". The numbers in parentheses indicate how many columns each variable takes up: state name (2), % black elected officials (4), % population African-American (4), dummy variable for southern state (1)

III. STATA commands I will be typing

```
1 □ log using black_officials, text
2   infile str2 state beo bpop south using
   /mit/course_number/Examples/black_officials.dat
3   list
4   mvdecode beo bpop, mv(-9)
5   histogram beo; histogram bpop; histogram bpop, bin(20)
5.1 graph7 beo; graph bpop; graph bpop, bin(20)
6   graph box beo bpop
6.1 graph7 beo bpop, box
7   scatter beo bpop
7.1 graph7 beo bpop
8   twoway (scatter beo bpop), yscale(range(0 40.))
   xscale(range(0 40.)) ysize(5) xsize(5)
8.1 graph7 beo bpop, xscale(0,40) yscale(0,40)
9   twoway (scatter beo bpop, mcolor(none) mlabel(state)
   mlabposition(0))
9.1 graph7 beo bpop, s([state])
10  twoway (scatter beo bpop) (line bpop bpop, sort)
10.1 graph7 bpop beo bpop, c(1.) s(i0) sort
11  twoway (scatter beo bpop, mcolor(none) mlabel(south)) (line
   bpop bpop, sort)
11.1 graph7 bpop beo bpop, c(1.) s(i[south]) sort
12  sort south; graph box beo bpop, over(south)
12.1 sort south; graph beo, box by(south)
13  gen diff=beo-bpop
14  gen diff_pct=diff/bpop
15  graph box diff, over(south)
15.1 graph7 diff, box by(south)
16  graph box diff_pct, over(south)
16.1 graph diff_pct, box by(south)
17  ttest diff, by(south)
18  ttest diff_pct, by(south)
19  twoway (scatter beo bpop) (lfit beo bpop)
19.1 reg beo bpop; predict py; graph beo py bpop, s(0i) c(.1)
   sort
20  save /mit/course_number/Examples/black_officials
21  use /mit/course_number/Examples/runoffs; list; list; clear
22  use /mit/course_number/Examples/black_officials
23  sort state
24  merge state using runoffs

25  use /mit/course_number/Examples/idaho_example
   collapse (sum) sen_rep sen_dem,by(dist)
```