

Sociology 213: Lab 3

Goal: Take your aggregate state data and map it in Arcview to see the percent black by state and the overall distribution of whites and blacks.

Overview: we are going to use the aggregate state data and the IPUMS data to study the “great migration” of blacks to the north. The aggregate state data will allow us to map the population redistribution. The IPUMS data will allow us to look at the characteristics of individual migrants.

Before the lab:

- 1) read the do-file mkmap.do and lookup the commands that you do not already know. Turn in an annotated copy of mkmap.do to me with notes to yourself at the start of lab on Thursday. I will ask you what the commands mean at the start of lab.
- 2) Type in the commands from mkmap.do and save this file in your personal directory to use in lab (no need to type in the * commands).
- 3) Read Chapters 7 & 8 in Getting to Know Arcview [optional, but very helpful]

There are three parts to this lab:

- 1) Merging the aggregate state data onto a datafile with state ids. This is explained in the do file mkmap.do
- 2) translating the resulting data to dbase (which is the format Arcview uses for data)
- 3) Merging the data onto the Arcview state map.

If you finish early, you can work on your own with your IPUMS data. What can we learn about migration using this data? What can we learn about occupational (i.e. social class differences) by race and migration?

I will show how to do this using the 1880 state data from s1880.dta, then you can repeat this using your own aggregate data from the last lab.

- 1) Run mkmap.do. Note that if you have states that don't merge, edit the s1880b.dta file and correct them.
- 2) Using DBMS copy to translate the file s1880map.dta to s1880.dbf: I will show you step by step:
 - a) open DBMS copy
 - b) chose “interactive”
 - c) choose the right directory and file type (stata V6)
 - d) click on the right data file (s1880map.dta)
 - e) click open, ok,
 - f) in output, select dbase 4, **make sure you are in the right directory [default is not current directory]**
 - g) click save
 - h) click save program (so you can reuse this later)
 - h) click do it

3) Arcview. We want to open the map file s99_d00 and add s1880map.dbf to it. Keep it simple.

a) open arcview (in programs)

b) new views, click the +, find the map file.

c) follow my visual instructions from here. Take step by step notes.

Goal: to replicate the two maps I made.

Lab homework: Due a week from Friday.

Replicate the two maps that I made using your aggregate data (i.e., your specific year) from the last lab [the legends do not have to be exactly the same, nor does it have to be in color]. If you are having difficulty—and getting started in Arcview is not easy—make an appointment to see me.

Mkmap.do

```
* first, use s1880.dta and edit the state names like "northcarolina"  
* or "north_carolina" so that it is "north carolina"  
* save s1880.dta as s1880b.dta
```

```
capture log close  
log using mkmap, replace  
clear
```

```
set more 1
```

```
* state.dta is a data set I made w/ state name and id#'s  
* we want to merge state.dta and s1880.dta
```

```
* 2 problems: 1) the state names in s1880 are uppercase,  
* and the state names in state.dta are not  
* 2) some names are different
```

```
* example:
```

```
use state  
list  
sort state  
save, replace
```

```
use s1880b  
list  
sort state  
save, replace  
* both data sets must be sorted by the merge variable
```

```
merge state using state  
tab _merge  
sort state  
list state _merge in 1/10
```

```
clear
```

```
* solution to problem #1: transform the strings into lower-case
```

```
* use help functions to see this command
```

```
use state  
replace state=lower(state)  
sort state  
save state2, replace
```

```
use s1880b  
replace state=lower(state)  
sort state  
merge state using state2
```

```
tab _merge
```

* you will need to go back and fix the ones with `_merge==1`

drop if `_merge==2`

* states not in the union in 1880

list state id

gen pctblck=colored/total

sum

save s1880map, replace

log close