

WDSC 422 Lab 7 – Assignment
Analysis of Logger Production Data
Harvesting Forest Products

Attached is a partial listing of weekly production data for ABC Logging, one of our logging contractors. The entire dataset can be found at www.wdsc.caf.wvu.edu/JXWang/courses/WDSC422/Labs/LoggerData.xls. If a password is asked to access to the file, just simply click “Cancel” button in the dialog box.

Save the data to a USB drive or a local hard drive first. You can do that via:

- (1) Save the data as LoggerData or other name under File menu in the Explorer, or
- (2) Follow the procedures below:
 - Select the data range from the Explorer
 - Copy the file from Explorer
 - Open a new Excel worksheet on your desktop
 - Paste the file to it
 - Save the file as LoggerData or other name

You can access to the help instructions at <http://www.wdsc.caf.wvu.edu/JXWang/courses/WDSC422/Labs/Lab7HelpIns.pdf>. Using these data, please analyze the production level of this contractor and its fluctuation over time. Specifically, I would like for you to provide me with the following for 1997, 1998 and year to date (YTD) production in 1999:

- Percentage of production by product class using tons.
- A line chart to show annual production using loads and tons.
- Average weekly production using loads and tons.
- Median weekly production using loads and tons.
- Standard deviation and the coefficient of variation (%) of weekly production using loads and tons.
- Weekly production representing the 10%, 25%, 75%, and 90% percentiles using loads and tons.
- Percentage of weeks with zero production using tons.
- Percentage of weeks with one, two, or more than two tracts.
- An x-y chart showing weekly production for 1998 using tons.
- A bar chart showing average weekly production in loads against the number of tracts in a week for 1998.

Please answer the following questions based on the above analyses:

- Is his production on track to match that of 1997 or 1998?
- Would the median or mean be a more representative production measure?

Please provide me a typed report by the beginning of lab next week. Attach any

supporting material you wish.

Definition of variables (columns) in LoggerData.xls:

Week Ending Date	The last day of the business week.
Days	The number of days during the week that we received wood from this contractor.
Tracts	The number of different tracts from which the contractor delivered wood during the week. Equals number of moves.
HPW Loads	Loads of hardwood pulpwood.
HPW Tons	Tons of hardwood pulpwood.
HST Loads	Loads of hardwood sawtimber.
HST Tons	Tons of hardwood sawtimber.
HCP Loads	Loads of hardwood chips.
HCP Tons	Tons of hardwood chips.