


# Understanding Variation

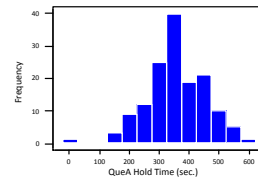
## For A Point In Time

## Over Time

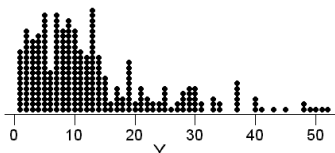
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- **Histograms**

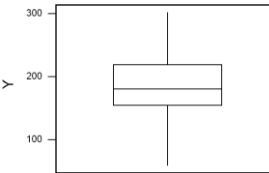
Graph > Histogram  
or  
Stat > Basic Statistics > Display ...and  
click on 



Dotplot for CycleTime



Boxplot



- **Dotplots**

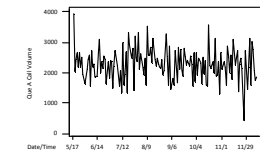
Graph > Dotplots

- **Boxplots**

Graph > Boxplot

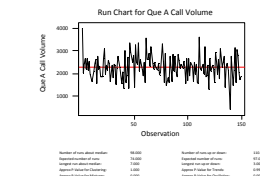
- **Time Series Plots**

Graph > Time Series Plot



- **Run Charts**

Stat > Quality Tools > Run Chart



- **Control Charts**

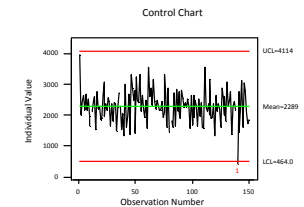
Stat > Control Charts >

### Individuals

Variables Charts for Individuals

### X-bar & R

Variables Charts for Subgroups



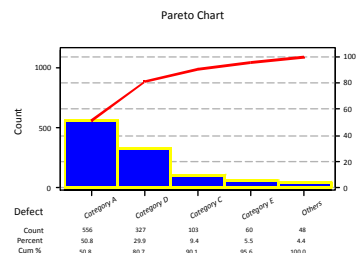
- **Tables**

Stat > Tables > Tally...

Category A	556
Category B	48
Category C	103
Category D	327
Category E	60

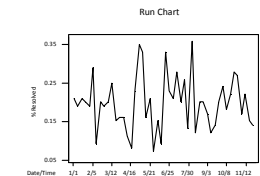
- **Pareto Charts**

Stat > Quality Tools > Pareto...



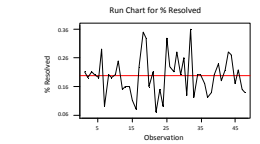
- **Time Series Plots**

Graph > Time Series Plot



- **Run Charts**

Stat > Quality Tools > Run Chart

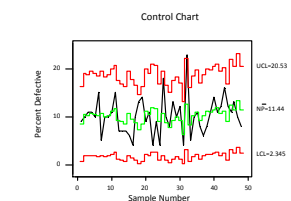


- **Control Charts**

Stat > Control Charts > Attribute Charts

### np or p

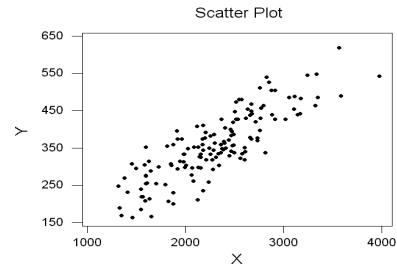
### c or u



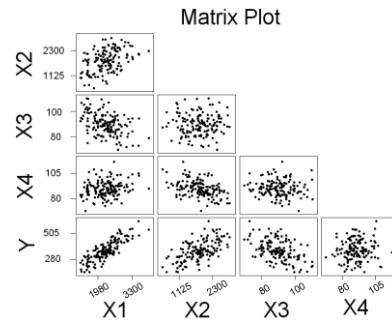
# Understanding Relationships

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- **Scatter Plots**  
Graph > Scatterplot

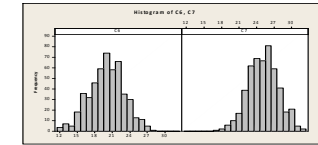


- **Matrix Plots**  
Graph > Matrix Plot



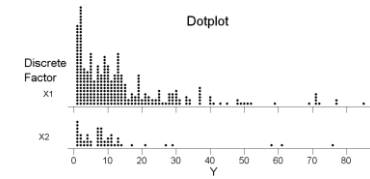
- **Histograms**

Graph > Histogram > Simple  
click "Multiple Graphs"



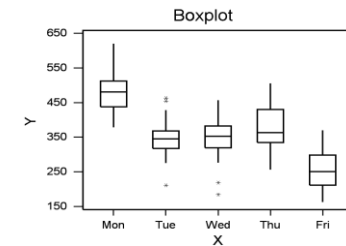
- **Dotplots**

Graph > Dotplot



- **Boxplots**

Graph > Boxplot

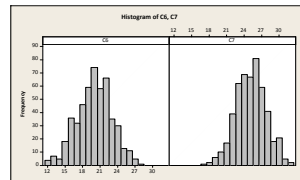


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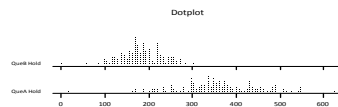
- **Histograms**

Graph > Histogram > Simple  
click "Multiple Graphs"



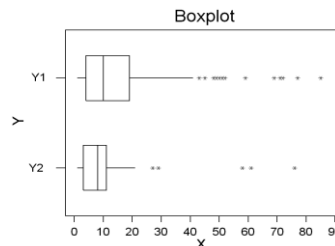
- **Dotplots**

Graph > Dotplot



- **Boxplots**

Graph > Boxplot > Multiple Y's  
Click on "Scale" and select  
"transpose value and category scales"



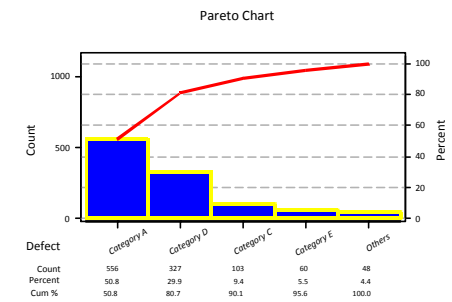
- **Tables**

Stat > Tables > Tally...

Category A	556
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- **Pareto Charts**

Stat > Quality Tools > Pareto...



Continuous

Discrete

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