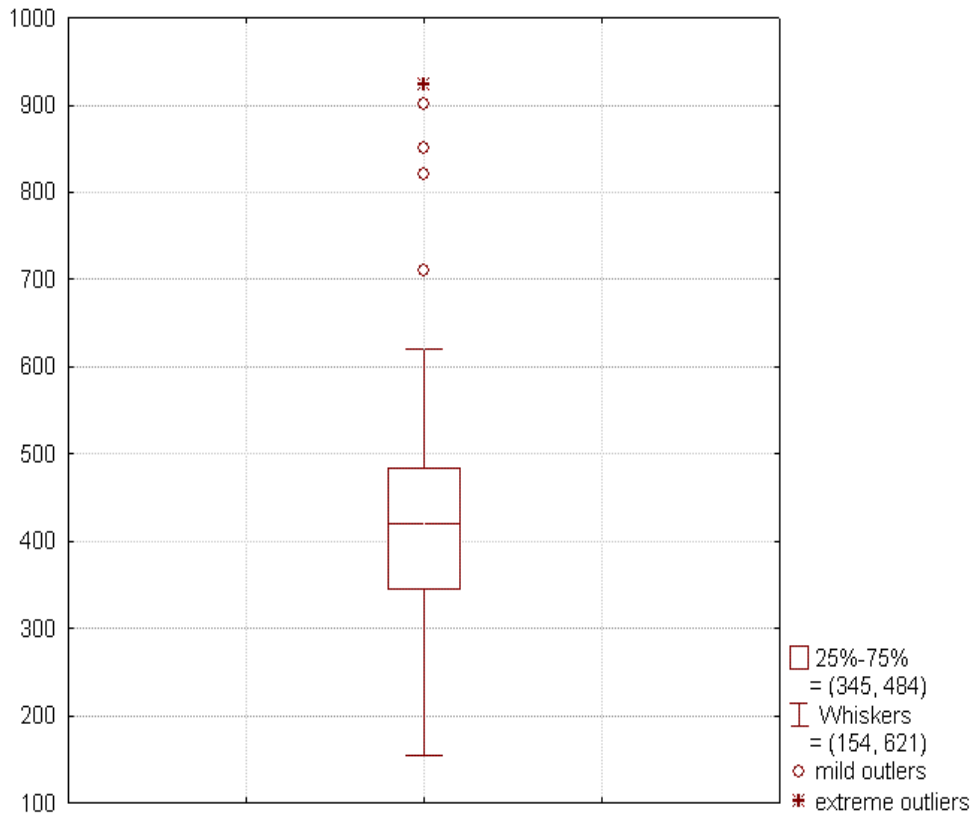


Box Plot (aka box-and-whisker diagram)



1		154
2		162
3		177
4		180
5		230
6		273
7		324
8	Q1 =	345
9		356
10		378
11		405
12		410
13		412
14		416
15	Q2 =	420
16		430
17		442
18		450
19		465
20		471
21		479
22	Q3 =	484
23		590
24		621
25		711
26		821
27		848
28		900
29		920

For this data set:

- Smallest non-outlier observation = 154
- Lower quartile $Q_1 = 345$
- Median $Q_2 = 420$
- Upper quartile $Q_3 = 484$
- Interquartile range $IQR = Q_3 - Q_1 = 484 - 345 = 139$
- Largest non-outlier observation = 621
- Mild outliers (o) are between $1.5 \cdot IQR$ and $3 \cdot IQR$ above Q_3 : (692.5, 901] and below Q_1 : [-72, 136.5)
- Extreme outliers (*) are above $Q_3 + 3 \cdot IQR = 901$ or below $Q_1 - 3 \cdot IQR = -72$
- The data is skewed to the right (positively skewed)

Rule for Whiskers:

The **lower whisker** starts at Q_1 and extends downward to $Q_1 - 1.5(IQR)$ or the minimum value, whichever is greater.

The **upper whisker** starts at Q_3 and extends upward to $Q_3 + 1.5(IQR)$ or the maximum value, whichever is lower.

References http://en.wikipedia.org/wiki/Box_plot

Exploratory Data Analysis, John W. Tukey, Addison-Wesley, Reading, MA 1977