Codebook

The data was collected from the accelerometers from the Samsung Galaxy S smartphone. A full description is available at the site where the data was obtained:

http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphone s

Here are the data for the project:

https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip

For each measurement we selected only the measurements on the mean and standard deviation for each measurement, that is to say that contains "mean" or "std" in its names, and additionally applied the average of each variable for each activity and each subject.

Summarizing the data in this data set of 55 variables and 180 entries.

Codebook summary table

| Variable | Class | # unique values | Missing |
|-------------------|-----------|-----------------|---------|
| Subject | integer | 30 | 0.00 % |
| ActivityName | character | 6 | 0.00 % |
| odyAcc.meanX | numeric | 180 | 0.00 % |
| odyAcc.meanY | numeric | 180 | 0.00 % |
| odyAcc.meanZ | numeric | 180 | 0.00 % |
| odyAcc.stdX | numeric | 180 | 0.00 % |
| odyAcc.stdY | numeric | 180 | 0.00 % |
| odyAcc.stdZ | numeric | 180 | 0.00 % |
| GravityAcc.meanX | numeric | 180 | 0.00 % |
| GravityAcc.meanY | numeric | 180 | 0.00 % |
| GravityAcc.meanZ | numeric | 180 | 0.00 % |
| GravityAcc.stdX | numeric | 180 | 0.00 % |
| GravityAcc.stdY | numeric | 180 | 0.00 % |
| GravityAcc.stdZ | numeric | 180 | 0.00 % |
| BodyAccJerk.meanX | numeric | 180 | 0.00 % |

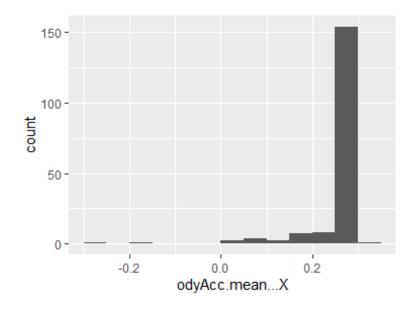
| | | I | |
|-----------------------|---------|-----|--------|
| BodyAccJerk.meanY | numeric | 180 | 0.00 % |
| BodyAccJerk.meanZ | numeric | 180 | 0.00 % |
| BodyAccJerk.stdX | numeric | 180 | 0.00 % |
| BodyAccJerk.stdY | numeric | 180 | 0.00 % |
| BodyAccJerk.stdZ | numeric | 180 | 0.00 % |
| tBodyGyro.meanX | numeric | 180 | 0.00 % |
| tBodyGyro.meanY | numeric | 180 | 0.00 % |
| tBodyGyro.meanZ | numeric | 180 | 0.00 % |
| tBodyGyro.stdX | numeric | 180 | 0.00 % |
| tBodyGyro.stdY | numeric | 180 | 0.00 % |
| tBodyGyro.stdZ | numeric | 180 | 0.00 % |
| tBodyGyroJerk.meanX | numeric | 180 | 0.00 % |
| tBodyGyroJerk.meanY | numeric | 180 | 0.00 % |
| tBodyGyroJerk.meanZ | numeric | 180 | 0.00 % |
| tBodyGyroJerk.stdX | numeric | 180 | 0.00 % |
| tBodyGyroJerk.stdY | numeric | 180 | 0.00 % |
| tBodyGyroJerk.stdZ | numeric | 180 | 0.00 % |
| tBodyAccMag.mean | numeric | 180 | 0.00 % |
| tBodyAccMag.std | numeric | 180 | 0.00 % |
| tGravityAccMag.mean | numeric | 180 | 0.00 % |
| tGravityAccMag.std | numeric | 180 | 0.00 % |
| tBodyAccJerkMag.mean | numeric | 180 | 0.00 % |
| tBodyAccJerkMag.std | numeric | 180 | 0.00 % |
| tBodyGyroMag.mean | numeric | 180 | 0.00 % |
| tBodyGyroMag.std | numeric | 180 | 0.00 % |
| tBodyGyroJerkMag.mean | numeric | 180 | 0.00 % |
| tBodyGyroJerkMag.std | numeric | 180 | 0.00 % |
| fBodyAcc.meanX | numeric | 180 | 0.00 % |
| fBodyAcc.meanY | numeric | 180 | 0.00 % |
| fBodyAcc.meanZ | numeric | 180 | 0.00 % |
| fBodyAcc.stdX | numeric | 180 | 0.00 % |
| fBodyAcc.stdY | numeric | 180 | 0.00 % |
| fBodyAcc.stdZ | numeric | 180 | 0.00 % |
| fBodyAcc.meanFreqX | numeric | 180 | 0.00 % |
| fBodyAcc.meanFreqY | numeric | 180 | 0.00 % |

| fBodyAcc.meanFreqZ | numeric | 180 | 0.00 % |
|--------------------|---------|-----|--------|
| fBodyAccJerk.meanX | numeric | 180 | 0.00 % |
| fBodyAccJerk.meanY | numeric | 180 | 0.00 % |
| fBodyAccJerk.meanZ | numeric | 180 | 0.00 % |
| fBodyAccJerk.stdX | numeric | 180 | 0.00 % |

Variable list

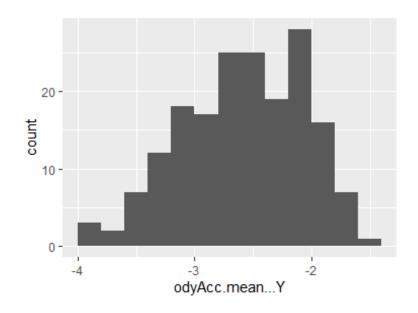
odyAcc.mean...X

| Feature | Result |
|-------------------------|------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | 0.28 |
| 1st and 3rd quartiles | 0.27; 0.28 |
| Min. and max. | -0.26; 0.3 |



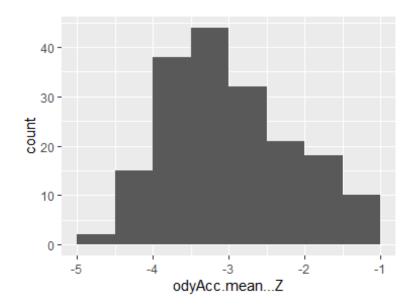
odyAcc.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -2.57 |
| 1st and 3rd quartiles | -2.93; -2.15 |
| Min. and max. | -3.98; -1.59 |



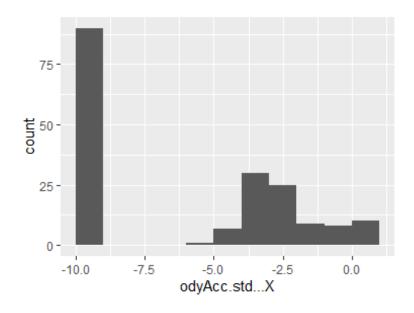
odyAcc.mean...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -3.17 |
| 1st and 3rd quartiles | -3.59; -2.44 |
| Min. and max. | -4.8; -1.09 |



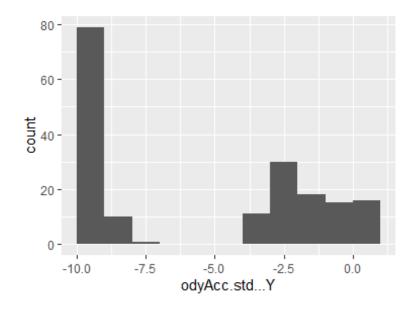
odyAcc.std...X

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.53 |
| 1st and 3rd quartiles | -9.8; -2.9 |
| Min. and max. | -9.96; 0.63 |



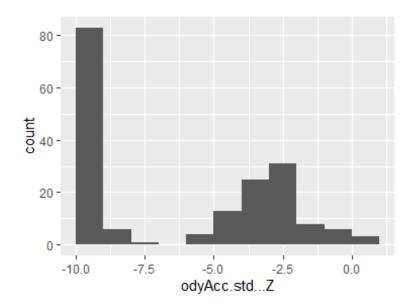
odyAcc.std...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -5.43 |
| 1st and 3rd quartiles | -9.42; -1.91 |
| Min. and max. | -9.9; 0.62 |



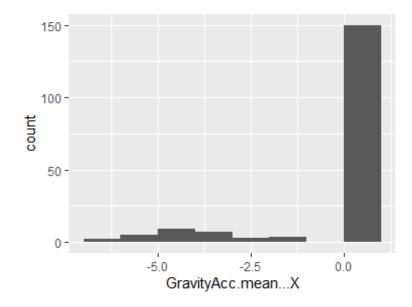
odyAcc.std...Z

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.66 |
| 1st and 3rd quartiles | -9.5; -2.97 |
| Min. and max. | -9.88; 0.61 |



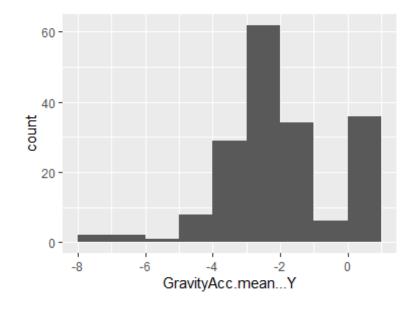
GravityAcc.mean...X

| Feature | Result |
|-------------------------|------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | 0.92 |
| 1st and 3rd quartiles | 0.84; 0.94 |
| Min. and max. | -6.8; 0.97 |



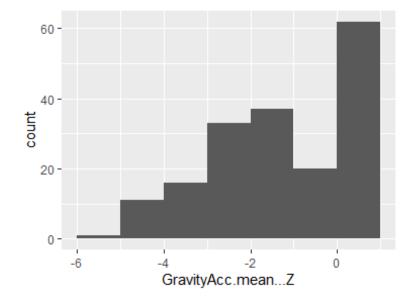
GravityAcc.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -2.18 |
| 1st and 3rd quartiles | -2.84; -1.06 |
| Min. and max. | -7.22; 0.96 |



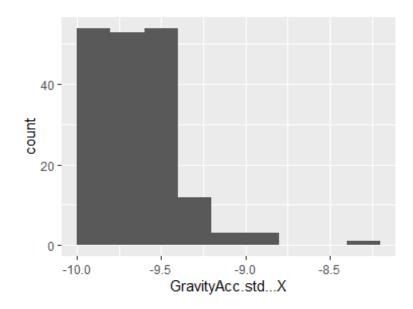
GravityAcc.mean...Z

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -1.2 |
| 1st and 3rd quartiles | -2.41; 0.13 |
| Min. and max. | -5.76; 0.96 |



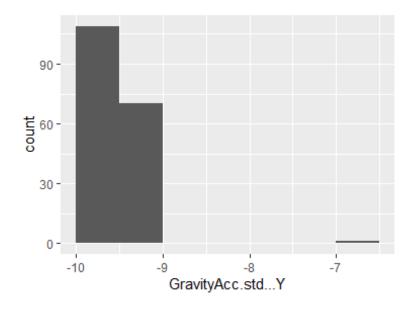
GravityAcc.std...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -9.69 |
| 1st and 3rd quartiles | -9.82; -9.51 |
| Min. and max. | -9.97; -8.3 |



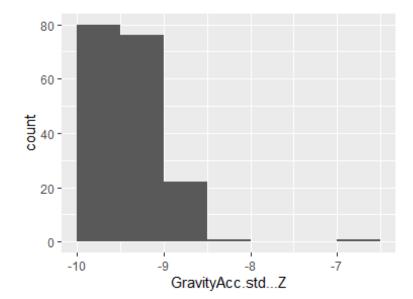
GravityAcc.std...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -9.59 |
| 1st and 3rd quartiles | -9.71; -9.37 |
| Min. and max. | -9.94; -6.94 |



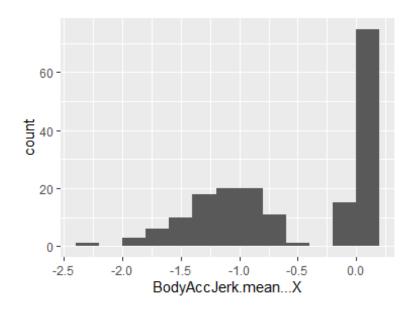
GravityAcc.std...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -9.46 |
| 1st and 3rd quartiles | -9.61; -9.19 |
| Min. and max. | -9.91; -6.53 |



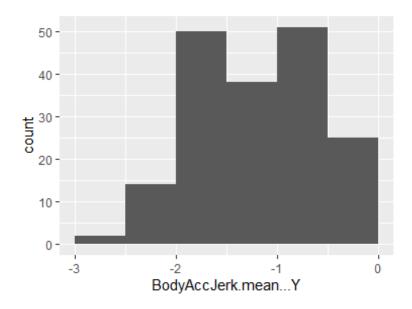
BodyAccJerk.mean...X

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -0.37 |
| 1st and 3rd quartiles | -1.13; 0.08 |
| Min. and max. | -2.3; 0.1 |



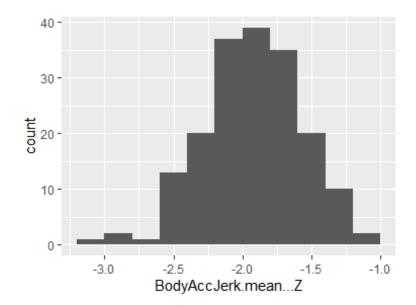
BodyAccJerk.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -1.25 |
| 1st and 3rd quartiles | -1.7; -0.64 |
| Min. and max. | -2.65; -0.02 |



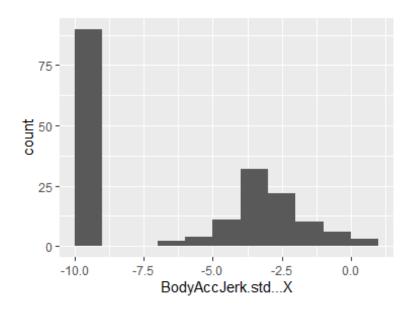
BodyAccJerk.mean...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -1.94 |
| 1st and 3rd quartiles | -2.13; -1.69 |
| Min. and max. | -3.19; -1.06 |



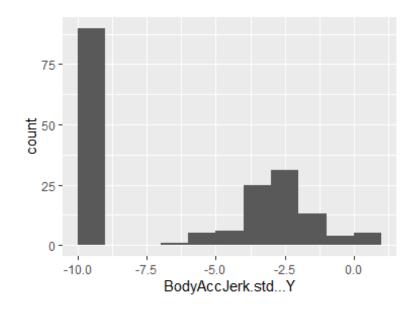
BodyAccJerk.std...X

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.1 |
| 1st and 3rd quartiles | -9.82; -3.1 |
| Min. and max. | -9.95; 0.54 |



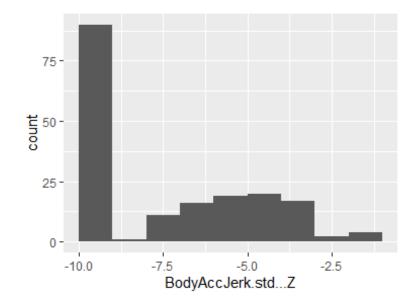
BodyAccJerk.std...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.76 |
| 1st and 3rd quartiles | -9.72; -2.76 |
| Min. and max. | -9.9; 0.22 |



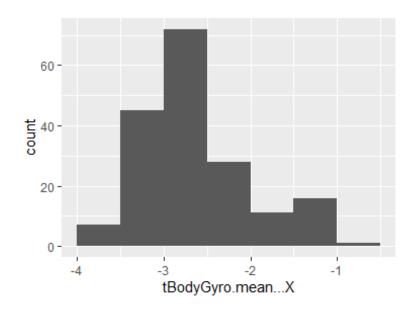
BodyAccJerk.std...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.84 |
| 1st and 3rd quartiles | -9.82; -5.12 |
| Min. and max. | -9.93; -1.43 |



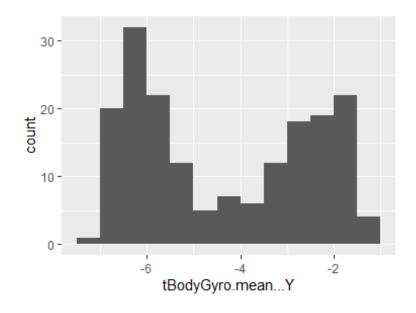
tBodyGyro.mean...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -2.77 |
| 1st and 3rd quartiles | -3.04; -2.37 |
| Min. and max. | -3.89; -0.79 |



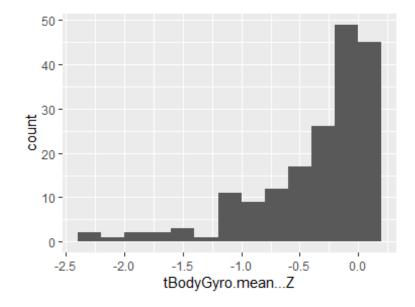
tBodyGyro.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -4.6 |
| 1st and 3rd quartiles | -6.14; -2.5 |
| Min. and max. | -7.21; -1.39 |



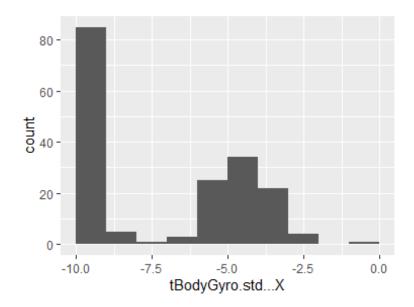
tBodyGyro.mean...Z

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -0.18 |
| 1st and 3rd quartiles | -0.57; 0 |
| Min. and max. | -2.23; 0.18 |



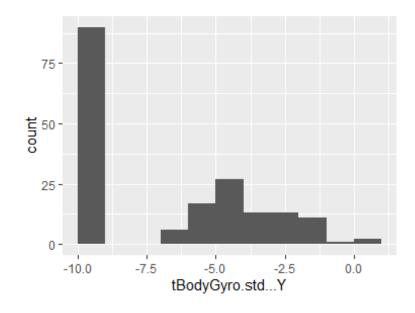
tBodyGyro.std...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.94 |
| 1st and 3rd quartiles | -9.73; -4.45 |
| Min. and max. | -9.94; -0.11 |



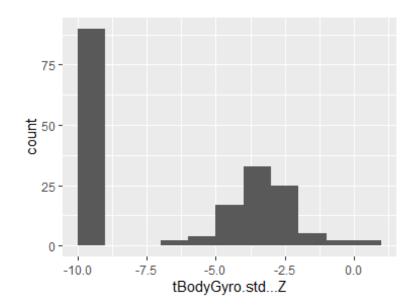
tBodyGyro.std...Y

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.02 |
| 1st and 3rd quartiles | -9.63; -4.3 |
| Min. and max. | -9.94; 0.48 |



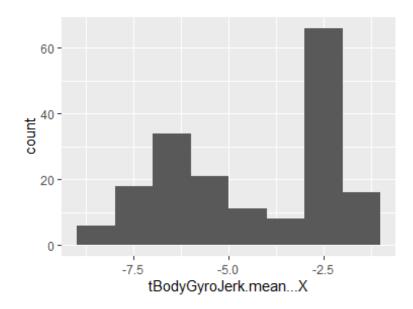
tBodyGyro.std...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.01 |
| 1st and 3rd quartiles | -9.61; -3.22 |
| Min. and max. | -9.86; 0.56 |



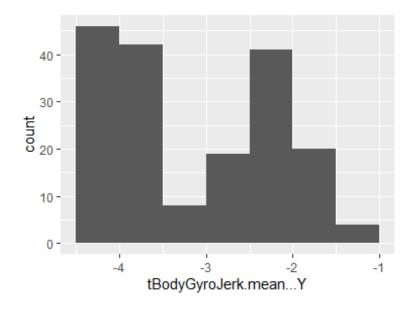
tBodyGyroJerk.mean...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -3.75 |
| 1st and 3rd quartiles | -6.27; -2.41 |
| Min. and max. | -8.47; -1.4 |



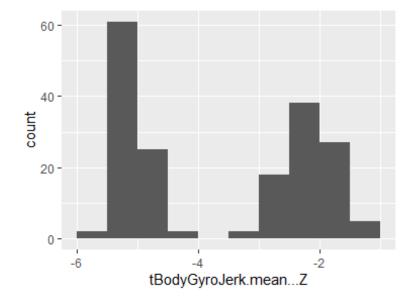
tBodyGyroJerk.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -3.4 |
| 1st and 3rd quartiles | -4; -2.23 |
| Min. and max. | -4.41; -1.06 |



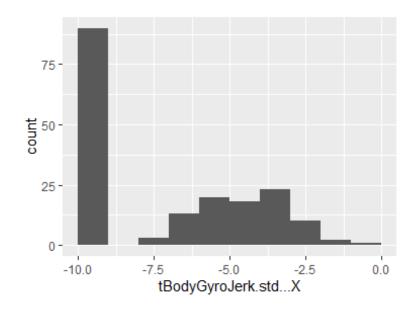
tBodyGyroJerk.mean...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -3.85 |
| 1st and 3rd quartiles | -5.13; -2.11 |
| Min. and max. | -5.59; -1.35 |



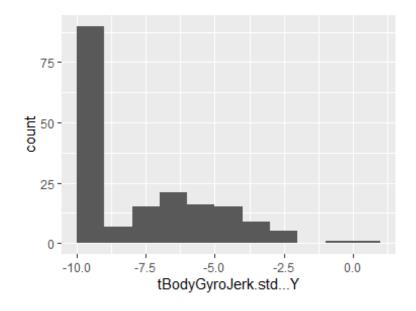
tBodyGyroJerk.std...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.4 |
| 1st and 3rd quartiles | -9.79; -4.63 |
| Min. and max. | -9.97; -0.85 |



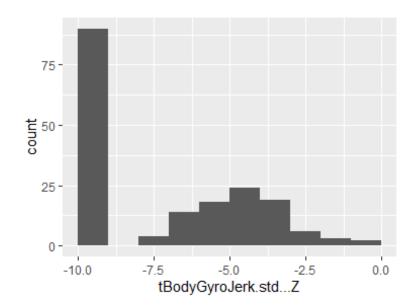
tBodyGyroJerk.std...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.94 |
| 1st and 3rd quartiles | -9.83; -5.86 |
| Min. and max. | -9.97; 0.2 |



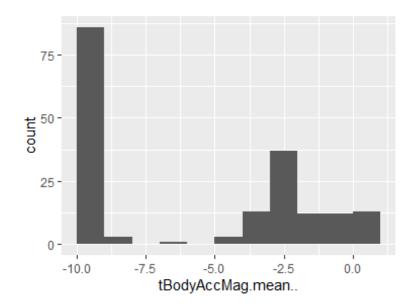
tBodyGyroJerk.std...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.61 |
| 1st and 3rd quartiles | -9.84; -4.74 |
| Min. and max. | -9.95; -0.44 |



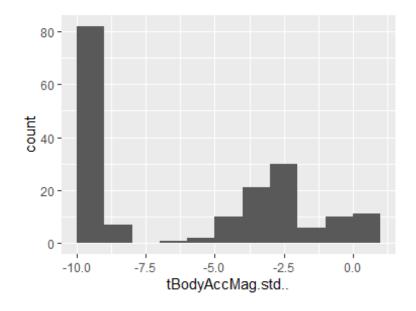
tBodyAccMag.mean..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -5.1 |
| 1st and 3rd quartiles | -9.57; -2.29 |
| Min. and max. | -9.86; 0.64 |



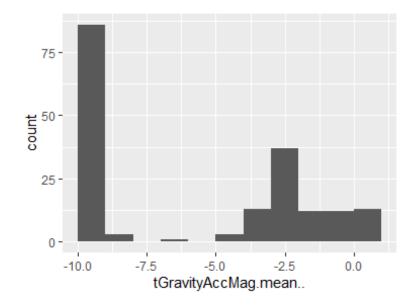
tBodyAccMag.std..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.18 |
| 1st and 3rd quartiles | -9.44; -2.73 |
| Min. and max. | -9.86; 0.43 |



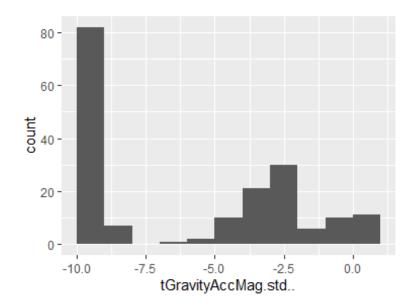
tGravityAccMag.mean..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -5.1 |
| 1st and 3rd quartiles | -9.57; -2.29 |
| Min. and max. | -9.86; 0.64 |



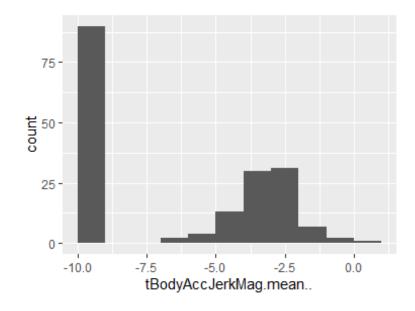
tGravityAccMag.std..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.18 |
| 1st and 3rd quartiles | -9.44; -2.73 |
| Min. and max. | -9.86; 0.43 |



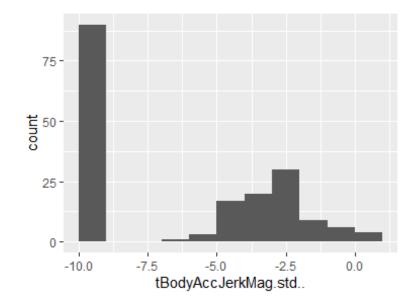
tBodyAccJerkMag.mean..

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.17 |
| 1st and 3rd quartiles | -9.8; -3.09 |
| Min. and max. | -9.93; 0.39 |



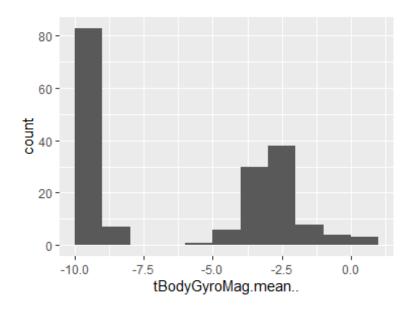
tBodyAccJerkMag.std..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.01 |
| 1st and 3rd quartiles | -9.76; -2.87 |
| Min. and max. | -9.95; 0.34 |



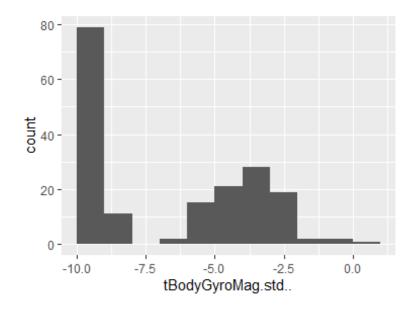
tBodyGyroMag.mean..

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.55 |
| 1st and 3rd quartiles | -9.45; -2.9 |
| Min. and max. | -9.81; 0.37 |



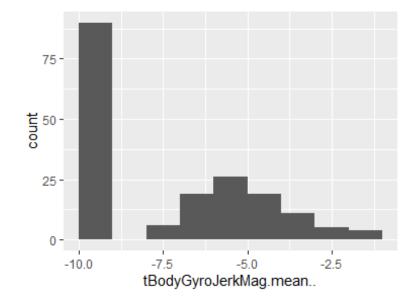
tBodyGyroMag.std..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.47 |
| 1st and 3rd quartiles | -9.48; -3.76 |
| Min. and max. | -9.81; 0.28 |



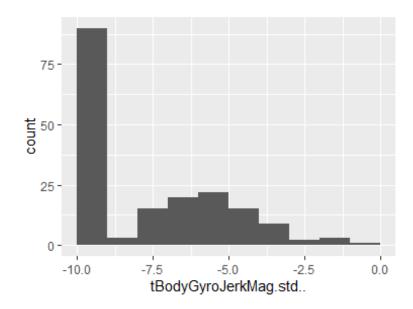
tBodyGyroJerkMag.mean..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.65 |
| 1st and 3rd quartiles | -9.85; -5.12 |
| Min. and max. | -9.97; -1.06 |



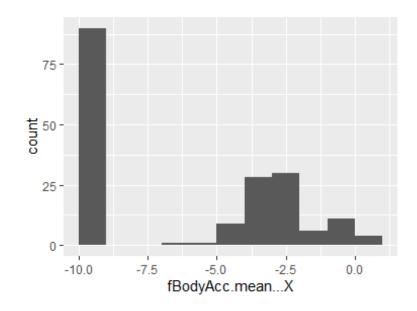
t Body Gyro Jerk Mag. std..

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.81 |
| 1st and 3rd quartiles | -9.8; -5.77 |
| Min. and max. | -9.98; -0.12 |



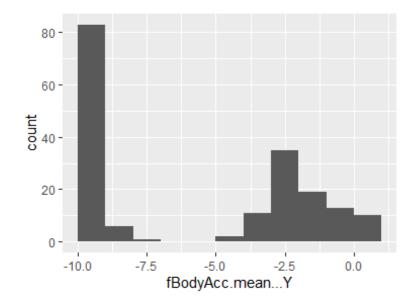
fBodyAcc.mean...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.69 |
| 1st and 3rd quartiles | -9.79; -2.95 |
| Min. and max. | -9.95; 0.54 |



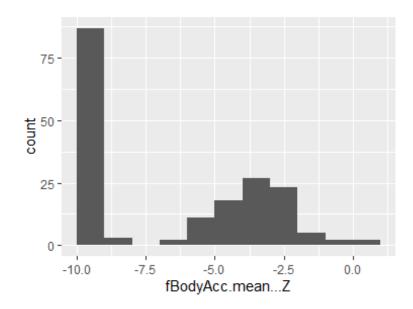
fBodyAcc.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.01 |
| 1st and 3rd quartiles | -9.54; -2.15 |
| Min. and max. | -9.89; 0.52 |



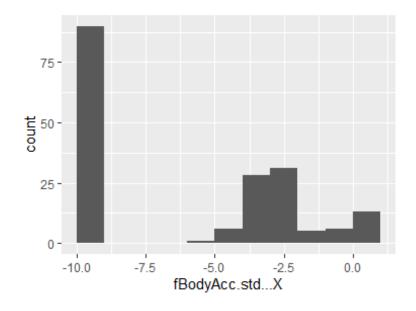
fBodyAcc.mean...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.24 |
| 1st and 3rd quartiles | -9.63; -3.39 |
| Min. and max. | -9.89; 0.26 |



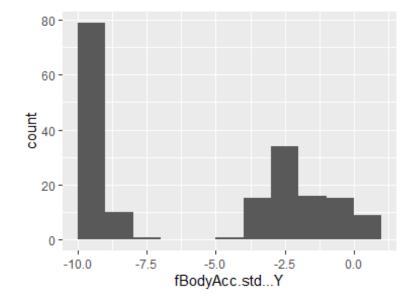
fBodyAcc.std...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.47 |
| 1st and 3rd quartiles | -9.82; -2.69 |
| Min. and max. | -9.97; 0.66 |



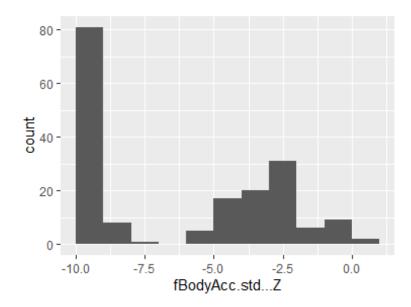
fBodyAcc.std...Y

| Feature | Result |
|-------------------------|-------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -5.76 |
| 1st and 3rd quartiles | -9.4; -2.26 |
| Min. and max. | -9.91; 0.56 |



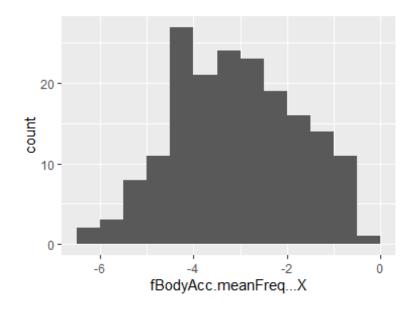
fBodyAcc.std...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -6.49 |
| 1st and 3rd quartiles | -9.46; -2.93 |
| Min. and max. | -9.87; 0.69 |



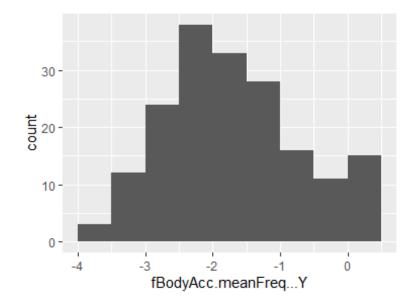
fBodyAcc.meanFreq...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -3.14 |
| 1st and 3rd quartiles | -4.08; -2.16 |
| Min. and max. | -6.36; -0.37 |



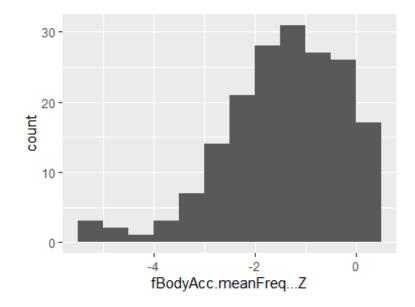
fBodyAcc.meanFreq...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -1.83 |
| 1st and 3rd quartiles | -2.37; -1.11 |
| Min. and max. | -3.99; 0.32 |



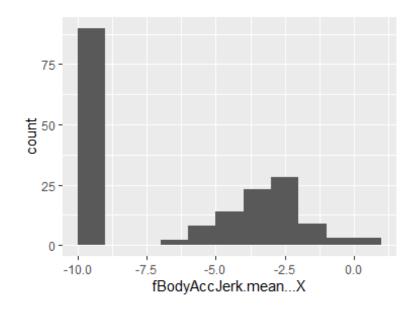
fBodyAcc.meanFreq...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -1.24 |
| 1st and 3rd quartiles | -2.13; -0.55 |
| Min. and max. | -5.36; 0.36 |



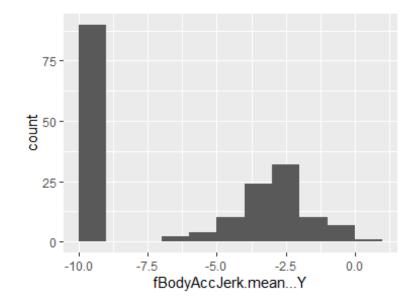
fBodyAccJerk.mean...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.13 |
| 1st and 3rd quartiles | -9.82; -3.09 |
| Min. and max. | -9.95; 0.42 |



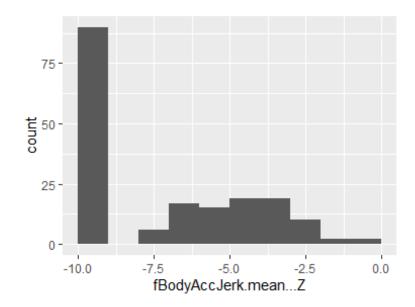
fBodyAccJerk.mean...Y

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -7.82 |
| 1st and 3rd quartiles | -9.72; -2.96 |
| Min. and max. | -9.89; 0.11 |



fBodyAccJerk.mean...Z

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.71 |
| 1st and 3rd quartiles | -9.8; -4.7 |
| Min. and max. | -9.92; -0.71 |



fBodyAccJerk.std...X

| Feature | Result |
|-------------------------|--------------|
| Variable type | numeric |
| Number of missing obs. | 0 (0 %) |
| Number of unique values | 180 |
| Median | -8.25 |
| 1st and 3rd quartiles | -9.84; -3.04 |
| Min. and max. | -9.95; 0.48 |

