### **Description of the Tidy data set**

The tidy data set (tidy\_av\_std) contains 181 rows and 69 columns, including column and row names. It represents an extract from combined training and test files (<https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip>) where only the measurements on the mean and standard deviation for each measurement were taken.

* mean(): Mean value
* std(): Standard deviation

The subjects (subjectID; first column) are numbered sequentially from 1 to 30. The activities are given by activityType (column 2) and activityID (column3). The activityTypes are assigned to the activityID according to:

1. WALKING
2. WALKING\_UPSTAIRS
3. WALKING\_DOWNSTAIRS
4. SITTING
5. STANDING
6. LAYING

There are in total 66 variables:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  | | --- | | 1. tBodyAcc-mean()-X | | 1. tBodyAcc-mean()-Y | | 1. tBodyAcc-mean()-Z | | 1. tBodyAcc-std()-X | | 1. tBodyAcc-std()-Y | | 1. tBodyAcc-std()-Z | | 1. tGravityAcc-mean()-X | | 1. tGravityAcc-mean()-Y | | 1. tGravityAcc-mean()-Z | | 1. tGravityAcc-std()-X | | 1. tGravityAcc-std()-Y | | 1. tGravityAcc-std()-Z | | 1. tBodyAccJerk-mean()-X | | 1. tBodyAccJerk-mean()-Y | | 1. tBodyAccJerk-mean()-Z | | 1. tBodyAccJerk-std()-X | | 1. tBodyAccJerk-std()-Y | | 1. tBodyAccJerk-std()-Z | | 1. tBodyGyro-mean()-X | | 1. tBodyGyro-mean()-Y | | 1. tBodyGyro-mean()-Z | | 1. tBodyGyro-std()-X | | 1. tBodyGyro-std()-Y | | 1. tBodyGyro-std()-Z | | 1. tBodyGyroJerk-mean()-X | | 1. tBodyGyroJerk-mean()-Y | | 1. tBodyGyroJerk-mean()-Z | | 1. tBodyGyroJerk-std()-X | | 1. tBodyGyroJerk-std()-Y | | 1. tBodyGyroJerk-std()-Z | | 1. tBodyAccMag-mean() | | 1. tBodyAccMag-std() | | 1. tGravityAccMag-mean() | | 1. tGravityAccMag-std() | | 1. tBodyAccJerkMag-mean() | | 1. tBodyAccJerkMag-std() | | 1. tBodyGyroMag-mean() | | 1. tBodyGyroMag-std() | | 1. tBodyGyroJerkMag-mean() | | 1. tBodyGyroJerkMag-std() | | 1. fBodyAcc-mean()-X | | 1. fBodyAcc-mean()-Y | | 1. fBodyAcc-mean()-Z | | 1. fBodyAcc-std()-X | | 1. fBodyAcc-std()-Y | | 1. fBodyAcc-std()-Z | | 1. fBodyAccJerk-mean()-X | | 1. fBodyAccJerk-mean()-Y | | 1. fBodyAccJerk-mean()-Z | | 1. fBodyAccJerk-std()-X | | 1. fBodyAccJerk-std()-Y | | 1. fBodyAccJerk-std()-Z | | 1. fBodyGyro-mean()-X | | 1. fBodyGyro-mean()-Y | | 1. fBodyGyro-mean()-Z | | 1. fBodyGyro-std()-X | | 1. fBodyGyro-std()-Y | | 1. fBodyGyro-std()-Z | | 1. fBodyAccMag-mean() | | 1. fBodyAccMag-std() | | 1. fBodyBodyAccJerkMag-mean() | | 1. fBodyBodyAccJerkMag-std() | | 1. fBodyBodyGyroMag-mean() | | 1. fBodyBodyGyroMag-std() | | 1. fBodyBodyGyroJerkMag-mean() | | 1. fBodyBodyGyroJerkMag-std() | |
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### The tidy data set includes the mean values of the 66 variables calculated per subject and activity. It is sorted by subject in ascending order.

The variable unites are:

“subjectID” is integer type.

“activtiyType” is factor type

“activityID” is numeric type.

All 66 variables are numeric type.