

Variable Name	Explanation	Values	Notes
subject	Identifies the subject who performed the activity	1 - 30	
activity	Identifies which of the six activities listed in "activity_labels.txt" the subject carried out	WALKING WALKING_UPSTAIRS WALKING_DOWNSTAIRS SITTING STANDING LAYING	
variable	Identifies which motion was being observed. These are split into the mean and standard deviation for each motion	See Table 2 In all cases the value obtained is either the mean or standard deviation (std) as designated in the variable name	"feature_selection.txt" provides further details on the features
mean	The average value for variable. Values are shown after subsetting by subject and activity	See SamsungClean.txt for values	

Variable	Time / Frequency	Explanation	Units
X.tBodyAcc-mean()-X	Time	Body acceleration where gravity is subtracted from total acceleration in the x,y,z-axes	g
X.tBodyAcc-mean()-Y			
X.tBodyAcc-mean()-Z			
X.tBodyAcc-std()-X			
X.tBodyAcc-std()-Y			
X.tBodyAcc-std()-Z			
X.tGravityAcc-mean()-X		Acceleration due to gravity in the x,y,z-axes	
X.tGravityAcc-mean()-Y			
X.tGravityAcc-mean()-Z			
X.tGravityAcc-std()-X			
X.tGravityAcc-std()-Y			
X.tGravityAcc-std()-Z			
X.tBodyAccJerk-mean()-X		Jerk of the body acceleration	
X.tBodyAccJerk-mean()-Y			
X.tBodyAccJerk-mean()-Z			
X.tBodyAccJerk-std()-X			

X.tBodyAccJerk-std()-Y				
X.tBodyAccJerk-std()-Z				
X.tBodyGyro-mean()-X		Angular velocity of the body	rad/s	
X.tBodyGyro-mean()-Y				
X.tBodyGyro-mean()-Z				
X.tBodyGyro-std()-X				
X.tBodyGyro-std()-Y				
X.tBodyGyro-std()-Z				
X.tBodyGyroJerk-mean()-X		Jerk of the angular velocity of the body		
X.tBodyGyroJerk-mean()-Y				
X.tBodyGyroJerk-mean()-Z				
X.tBodyGyroJerk-std()-X				
X.tBodyGyroJerk-std()-Y				
X.tBodyGyroJerk-std()-Z				
X.tBodyAccMag-mean()		Magnitude of the body acceleration vector	g	
X.tBodyAccMag-std()				
X.tGravityAccMag-mean()				
X.tGravityAccMag-std()		Magnitude of the gravity acceleration vector		
X.tBodyAccJerkMag-mean()				
X.tBodyAccJerkMag-std()				
X.tBodyGyroMag-mean()		Magnitude of the angular velocity of the body	rad/s	
X.tBodyGyroMag-std()				
X.tBodyGyroJerkMag-mean()				
X.tBodyGyroJerkMag-std()		Magnitude of the jerk of the angular velocity vector		
X.fBodyAcc-mean()-X	Frequency			Body acceleration where gravity is subtracted from total acceleration in the x,y,z-axes
X.fBodyAcc-mean()-Y				
X.fBodyAcc-mean()-Z				
X.fBodyAcc-std()-X				
X.fBodyAcc-std()-Y				
X.fBodyAcc-std()-Z				
X.fBodyAcc-meanFreq()-X	Average frequency of body acceleration	Hz		
X.fBodyAcc-meanFreq()-Y				
X.fBodyAcc-meanFreq()-Z				
X.fBodyAccJerk-mean()-X	Jerk of the body acceleration	g		
X.fBodyAccJerk-mean()-Y				
X.fBodyAccJerk-mean()-Z				
X.fBodyAccJerk-std()-X				
X.fBodyAccJerk-std()-Y				

X.fBodyAccJerk-std()-Z			
X.fBodyAccJerk-meanFreq()-X		Average frequency of jerk of body acceleration	Hz
X.fBodyAccJerk-meanFreq()-Y			
X.fBodyAccJerk-meanFreq()-Z			
X.fBodyGyro-mean()-X		Angular velocity of the body	rad/s
X.fBodyGyro-mean()-Y			
X.fBodyGyro-mean()-Z			
X.fBodyGyro-std()-X			
X.fBodyGyro-std()-Y			
X.fBodyGyro-std()-Z			
X.fBodyGyro-meanFreq()-X		Average frequency of angular velocity of body	Hz
X.fBodyGyro-meanFreq()-Y			
X.fBodyGyro-meanFreq()-Z			
X.fBodyAccMag-mean()		Magnitude of the body acceleration vector	g
X.fBodyAccMag-std()			
X.fBodyAccMag-meanFreq()		Average frequency of magnitude of body acceleration	Hz
X.fBodyBodyAccJerkMag-mean()		Magnitude of the jerk of the body acceleration vector	g
X.fBodyBodyAccJerkMag-std()			
X.fBodyBodyAccJerkMag-meanFreq()		Average frequency of magnitude of the jerk of body acceleration	Hz
X.fBodyBodyGyroMag-mean()		Magnitude of the angular velocity of the body	rad/s
X.fBodyBodyGyroMag-std()			
X.fBodyBodyGyroMag-meanFreq()		Average frequency of magnitude of angular velocity	Hz
X.fBodyBodyGyroJerkMag-mean()		Magnitude of the jerk of the angular velocity vector	rad/s
X.fBodyBodyGyroJerkMag-std()			
X.fBodyBodyGyroJerkMag-meanFreq()		Average frequency of magnitude of jerk of the angular velocity	Hz