

Code book

Marcos Marv

05/22/2015

Overview on the experiment, variables and data

In this section we reproduce <http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones> in order to briefly describe the experiments that yielded the data. The experiments have been carried out with a group of 30 volunteers within an age bracket of 19-48 years. Each person performed six activities

- walking
- walking_upstairs,
- walking_downstairs,
- sitting,
- standing,
- laying

wearing a smartphone (Samsung Galaxy S II) on the waist. Using its embedded accelerometer and gyroscope, the authors captured 3-axial linear acceleration and 3-axial angular velocity at a constant rate of 50Hz. The obtained dataset has been randomly partitioned into two sets, where 70% of the volunteers was selected for generating the training data and 30% the test data.

The sensor signals (accelerometer and gyroscope) were pre-processed by applying noise filters and then sampled in fixed-width sliding windows of 2.56 sec and 50% overlap (128 readings/window). The sensor acceleration signal, which has gravitational and body motion components, was separated using a Butterworth low-pass filter into body acceleration and gravity. The gravitational force is assumed to have only low frequency components, therefore a filter with 0.3 Hz cutoff frequency was used. From each window, a vector of features was obtained by calculating variables from the time and frequency domain.

Brief description of variables and data

The data can be downloaded from <https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip>.

As we have already said, the data was splitted into two subgroups labeled as “training” data and “test” data.

The files

- subject_test.txt
- subject_train.txt

assign a number between 1 and 30 to the individual that performed each experiment and belong to the test and train subset, respectively. Each individual performed each activity more than once.

The files

- y_test.txt
- y_train.txt

assign a number between 1 and 6 to the activity performed by each individual. The files

- X_test.txt
- X_train.txt

contain the values of the 561 variables (we also refer to them as *features*) for each individual belonging to the test and train subset, respectively.

Feature selection

The features selected for this database come from the accelerometer 3-axial raw signals tAcc-XYZ and the gyroscope 3-axial raw signals tGyro-XYZ. These time domain signals (prefix ‘t’ to denote time) were captured at a constant rate of 50 Hz. Then they were filtered using a median filter and a 3rd order low pass Butterworth filter with a corner frequency of 20 Hz to remove noise.

Similarly, the acceleration signal was then separated into body acceleration signals (tBodyAcc-XYZ) and gravity acceleration signals (tGravityAcc-XYZ) using another low pass Butterworth filter with a corner frequency of 0.3 Hz.

Subsequently, the body linear acceleration and angular velocity were derived in time to obtain Jerk signals (tBodyAccJerk-XYZ and tBodyGyroJerk-XYZ).

Also the magnitude of these three-dimensional signals were calculated using the Euclidean norm (tBodyAccMag, tGravityAccMag, tBodyAccJerkMag, tBodyGyroMag, tBodyGyroJerkMag).

Finally a Fast Fourier Transform (FFT) was applied to some of these signals producing fBodyAcc-XYZ, fBodyAccJerk-XYZ, fBodyGyro-XYZ, fBodyAccJerkMag, fBodyGyroMag, fBodyGyroJerkMag. (Note the ‘f’ to indicate frequency domain signals).

These signals were used to estimate variables of the feature vector for each pattern: ‘-XYZ’ is used to denote 3-axial signals in the X, Y and Z directions. The set of variables that were estimated from these signals are:

```
mean(): Mean value
std(): Standard deviation
mad(): Median absolute deviation
max(): Largest value in array
min(): Smallest value in array
sma(): Signal magnitude area
energy(): Energy measure. Sum of the squares divided by the number of values.
iqr(): Interquartile range
entropy(): Signal entropy
arCoeff(): Autorregression coefficients with Burg order equal to 4
correlation(): correlation coefficient between two signals
maxInds(): index of the frequency component with largest magnitude
meanFreq(): Weighted average of the frequency components to obtain a mean frequency
skewness(): skewness of the frequency domain signal
kurtosis(): kurtosis of the frequency domain signal
bandsEnergy(): Energy of a frequency interval within the 64 bins of the FFT of each window.
angle(): Angle between to vectors.
```

Additional vectors obtained by averaging the signals in a signal window sample. These are used on the angle() variable:

```
gravityMean
tBodyAccMean
tBodyAccJerkMean
tBodyGyroMean
tBodyGyroJerkMean
```

Summing up, the raw data consists of 561 variables, and our study focuses on those related with the *mean* and the *standard deviation*. A list of these variables and its description can be found in the section Variables of interest.

The complete list of variables of each feature vector and its description is available in the section Enumeration and description of all the variables.

Transformations or work that you performed to clean up the data

We have done the following to clean and tidy the raw data:

1. Create a data.table that gathers the ID number of each individual with the activity performed and the corresponding values of the measured variables. Since there is no indication, we assume that each row of each table (file) refers to the same individual. That is:
 - the first row in subject_test.txt stands for individual 1 in the test subset.
 - The first row in y_test.txt stands for activity performed by individual 1 in the test subset.
 - The first row in X_test.txt stands for the corresponding measures of all the variables. It is done for both test and training files. Let us call the data.frames dfTest and dfTraining.
2. Gather the data.frames dfTest and dfTraining.
3. We extract only the measurements on the mean and standard deviation for each measurement.
4. The activities are coded with a number between 1 and 6. We set descriptive activity names to name the activities in the data set.
5. We set descriptive labels variable names.

The resulting data (contained in a data.frame) is the tidy data.

Variables of interest

In this section we list and describe the variables mentioned in step 3. The number assigned to each variable refers to its order in the complete list of variables of the raw data included in the next section Enumeration and description of all the variables.

```
## Variable number 1. Variable name: subject. Variable class: integer
## Variable range: [1, 30].
## 1 = walking
## 2 = walking_upstairs
## 3 = walking_downstairs
## 4 = sitting
## 5 = standing
## 6 = laying

## Variable number 2. Variable name: activity. Variable class: integer
## Variable range: [1, 6].
## 1 = walking
## 2 = walking_upstairs
## 3 = walking_downstairs
## 4 = sitting
## 5 = standing
## 6 = laying
```

```

## Variable number 3. Variable nametBodyAcc-mean()-X. Variable class: numeric
## Mean value of the
## time body acceleration X axis component
##
## Variable number 4. Variable nametBodyAcc-mean()-Y. Variable class: numeric
## Mean value of the
## time body acceleration Y axis component
##
## Variable number 5. Variable nametBodyAcc-mean()-Z. Variable class: numeric
## Mean value of the
## time body acceleration Z axis component
##
## Variable number 6. Variable nametBodyAcc-std()-X. Variable class: numeric
## Standard deviation of the
## time body acceleration X axis component
##
## Variable number 7. Variable nametBodyAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## time body acceleration Y axis component
##
## Variable number 8. Variable nametBodyAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## time body acceleration Z axis component
##
## Variable number 43. Variable nametGravityAcc-mean()-X. Variable class: numeric
## Mean value of the
## time gravity acceleration X axis component
##
## Variable number 44. Variable nametGravityAcc-mean()-Y. Variable class: numeric
## Mean value of the
## time gravity acceleration Y axis component
##
## Variable number 45. Variable nametGravityAcc-mean()-Z. Variable class: numeric
## Mean value of the
## time gravity acceleration Z axis component
##
## Variable number 46. Variable nametGravityAcc-std()-X. Variable class: numeric
## Standard deviation of the
## time gravity acceleration X axis component
##
## Variable number 47. Variable nametGravityAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## time gravity acceleration Y axis component
##
## Variable number 48. Variable nametGravityAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## time gravity acceleration Z axis component
##
## Variable number 83. Variable nametBodyAccJerk-mean()-X. Variable class: numeric
## Mean value of the
## time body acceleration Jerk signals X axis component
##
## Variable number 84. Variable nametBodyAccJerk-mean()-Y. Variable class: numeric
## Mean value of the

```

```

## time body acceleration Jerk signals Y axis component
##
## Variable number 85. Variable nametBodyAccJerk-mean()-Z. Variable class: numeric
## Mean value of the
## time body acceleration Jerk signals Z axis component
##
## Variable number 86. Variable nametBodyAccJerk-std()-X. Variable class: numeric
## Standard deviation of the
## time body acceleration Jerk signals X axis component
##
## Variable number 87. Variable nametBodyAccJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## time body acceleration Jerk signals Y axis component
##
## Variable number 88. Variable nametBodyAccJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## time body acceleration Jerk signals Z axis component
##
## Variable number 123. Variable nametBodyGyro-mean()-X. Variable class: numeric
## Mean value of the
## time body gyroscope X axis component
##
## Variable number 124. Variable nametBodyGyro-mean()-Y. Variable class: numeric
## Mean value of the
## time body gyroscope Y axis component
##
## Variable number 125. Variable nametBodyGyro-mean()-Z. Variable class: numeric
## Mean value of the
## time body gyroscope Z axis component
##
## Variable number 126. Variable nametBodyGyro-std()-X. Variable class: numeric
## Standard deviation of the
## time body gyroscope X axis component
##
## Variable number 127. Variable nametBodyGyro-std()-Y. Variable class: numeric
## Standard deviation of the
## time body gyroscope Y axis component
##
## Variable number 128. Variable nametBodyGyro-std()-Z. Variable class: numeric
## Standard deviation of the
## time body gyroscope Z axis component
##
## Variable number 163. Variable nametBodyGyroJerk-mean()-X. Variable class: numeric
## Mean value of the
## time body gyroscope Jerk signals X axis component
##
## Variable number 164. Variable nametBodyGyroJerk-mean()-Y. Variable class: numeric
## Mean value of the
## time body gyroscope Jerk signals Y axis component
##
## Variable number 165. Variable nametBodyGyroJerk-mean()-Z. Variable class: numeric
## Mean value of the
## time body gyroscope Jerk signals Z axis component
##

```

```

## Variable number 166. Variable nametBodyGyroJerk-std()-X. Variable class: numeric
## Standard deviation of the
## time body gyroscope Jerk signals X axis component
##
## Variable number 167. Variable nametBodyGyroJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## time body gyroscope Jerk signals Y axis component
##
## Variable number 168. Variable nametBodyGyroJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## time body gyroscope Jerk signals Z axis component
##
## Variable number 203. Variable nametBodyAccMag-mean(). Variable class: numeric
## Mean value of the
## time body acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 204. Variable nametBodyAccMag-std(). Variable class: numeric
## Standard deviation of the
## time body acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 216. Variable nametGravityAccMag-mean(). Variable class: numeric
## Mean value of the
## time gravity acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 217. Variable nametGravityAccMag-std(). Variable class: numeric
## Standard deviation of the
## time gravity acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 229. Variable nametBodyAccJerkMag-mean(). Variable class: numeric
## Mean value of the
## time body acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 230. Variable nametBodyAccJerkMag-std(). Variable class: numeric
## Standard deviation of the
## time body acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 242. Variable nametBodyGyroMag-mean(). Variable class: numeric
## Mean value of the
## time body gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 243. Variable nametBodyGyroMag-std(). Variable class: numeric
## Standard deviation of the
## time body gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 255. Variable nametBodyGyroJerkMag-mean(). Variable class: numeric
## Mean value of the
## time body gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 256. Variable nametBodyGyroJerkMag-std(). Variable class: numeric
## Standard deviation of the
## time body gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 268. Variable namefBodyAcc-mean()-X. Variable class: numeric
## Mean value of the

```

```

## frequency domain signal (after applying the Fast Fourier Transform) body acceleration X axis comp
##
## Variable number 269. Variable namefBodyAcc-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Y axis comp
##
## Variable number 270. Variable namefBodyAcc-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Z axis comp
##
## Variable number 271. Variable namefBodyAcc-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration X axis comp
##
## Variable number 272. Variable namefBodyAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Y axis comp
##
## Variable number 273. Variable namefBodyAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Z axis comp
##
## Variable number 296. Variable namefBodyAcc-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration X axis comp
##
## Variable number 297. Variable namefBodyAcc-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Y axis comp
##
## Variable number 298. Variable namefBodyAcc-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Z axis comp
##
## Variable number 347. Variable namefBodyAccJerk-mean()-X. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 348. Variable namefBodyAccJerk-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 349. Variable namefBodyAccJerk-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 350. Variable namefBodyAccJerk-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 351. Variable namefBodyAccJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##

```

```

## Variable number 352. Variable namefBodyAccJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 375. Variable namefBodyAccJerk-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 376. Variable namefBodyAccJerk-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 377. Variable namefBodyAccJerk-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 426. Variable namefBodyGyro-mean()-X. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope X axis compon
##
## Variable number 427. Variable namefBodyGyro-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Y axis compon
##
## Variable number 428. Variable namefBodyGyro-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Z axis compon
##
## Variable number 429. Variable namefBodyGyro-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope X axis compon
##
## Variable number 430. Variable namefBodyGyro-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Y axis compon
##
## Variable number 431. Variable namefBodyGyro-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Z axis compon
##
## Variable number 454. Variable namefBodyGyro-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope X axis compon
##
## Variable number 455. Variable namefBodyGyro-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Y axis compon
##
## Variable number 456. Variable namefBodyGyro-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Z axis compon
##
## Variable number 505. Variable namefBodyAccMag-mean(). Variable class: numeric
## Mean value of the

```



```

## frequency domain signal (after applying the Fast Fourier Transform) body acceleration magnitude (
##
## Variable number 506. Variable name: fBodyAccMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration magnitude (
##
## Variable number 515. Variable name: fBodyAccMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration magnitude (
##
## Variable number 518. Variable name: fBodyBodyAccJerkMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 519. Variable name: fBodyBodyAccJerkMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 528. Variable name: fBodyBodyAccJerkMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body acceleration Jerk signals
##
## Variable number 531. Variable name: fBodyBodyGyroMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope magnitude (cal
##
## Variable number 532. Variable name: fBodyBodyGyroMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope magnitude (cal
##
## Variable number 541. Variable name: fBodyBodyGyroMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope magnitude (cal
##
## Variable number 544. Variable name: fBodyBodyGyroJerkMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Jerk signals ma
##
## Variable number 545. Variable name: fBodyBodyGyroJerkMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Jerk signals ma
##
## Variable number 554. Variable name: fBodyBodyGyroJerkMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body gyroscope Jerk signals ma

```

Enumeration and description of all the variables

```

## Variable number 1. Variable name: subject. Variable class: integer
## Variable range: [1, 30].
## 1 = walking
## 2 = walking_upstairs
## 3 = walking_downstairs

```

```

## 4 = sitting
## 5 = standing
## 6 = laying

## Variable number 2. Variable name: activity. Variable class: integer
## Variable range: [1, 6].
## 1 = walking
## 2 = walking_upstairs
## 3 = walking_downstairs
## 4 = sitting
## 5 = standing
## 6 = laying

## Note that the value of the following measures ranges are bounded so that lie in [-1,1].

## Variable number 3. Variable nametBodyAcc-mean()-X. Variable class: numeric
## Mean value of the
## time body
## acceleration X axis component
##
## Variable number 4. Variable nametBodyAcc-mean()-Y. Variable class: numeric
## Mean value of the
## time body
## acceleration Y axis component
##
## Variable number 5. Variable nametBodyAcc-mean()-Z. Variable class: numeric
## Mean value of the
## time body
## acceleration Z axis component
##
## Variable number 6. Variable nametBodyAcc-std()-X. Variable class: numeric
## Standard deviation of the
## time body
## acceleration X axis component
##
## Variable number 7. Variable nametBodyAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## time body
## acceleration Y axis component
##
## Variable number 8. Variable nametBodyAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## time body
## acceleration Z axis component
##
## Variable number 9. Variable nametBodyAcc-mad()-X. Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration X axis component
##
## Variable number 10. Variable nametBodyAcc-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## time body

```

```

## acceleration    Y axis component
##
## Variable number 11. Variable nametBodyAcc-mad()-Z. Variable class: numeric
## Median absolute deviation  of the
## time body
## acceleration    Z axis component
##
## Variable number 12. Variable nametBodyAcc-max()-X. Variable class: numeric
## Largest value in array of the
## time body
## acceleration    X axis component
##
## Variable number 13. Variable nametBodyAcc-max()-Y. Variable class: numeric
## Largest value in array of the
## time body
## acceleration    Y axis component
##
## Variable number 14. Variable nametBodyAcc-max()-Z. Variable class: numeric
## Largest value in array of the
## time body
## acceleration    Z axis component
##
## Variable number 15. Variable nametBodyAcc-min()-X. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration    X axis component
##
## Variable number 16. Variable nametBodyAcc-min()-Y. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration    Y axis component
##
## Variable number 17. Variable nametBodyAcc-min()-Z. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration    Z axis component
##
## Variable number 18. Variable nametBodyAcc-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## acceleration
##
## Variable number 19. Variable nametBodyAcc-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time body
## acceleration    X axis component
##
## Variable number 20. Variable nametBodyAcc-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time body
## acceleration    Y axis component
##
## Variable number 21. Variable nametBodyAcc-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the

```

```

## time body
## acceleration    Z axis component
##
## Variable number 22. Variable nametBodyAcc-iqr()-X. Variable class: numeric
## Interquartile range  of the
## time body
## acceleration    X axis component
##
## Variable number 23. Variable nametBodyAcc-iqr()-Y. Variable class: numeric
## Interquartile range  of the
## time body
## acceleration    Y axis component
##
## Variable number 24. Variable nametBodyAcc-iqr()-Z. Variable class: numeric
## Interquartile range  of the
## time body
## acceleration    Z axis component
##
## Variable number 25. Variable nametBodyAcc-entropy()-X. Variable class: numeric
## Signal entropy of the
## time body
## acceleration    X axis component
##
## Variable number 26. Variable nametBodyAcc-entropy()-Y. Variable class: numeric
## Signal entropy of the
## time body
## acceleration    Y axis component
##
## Variable number 27. Variable nametBodyAcc-entropy()-Z. Variable class: numeric
## Signal entropy of the
## time body
## acceleration    Z axis component
##
## Variable number 28. Variable nametBodyAcc-arCoeff()-X,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration    X axis component
##
## Variable number 29. Variable nametBodyAcc-arCoeff()-X,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration    X axis component
##
## Variable number 30. Variable nametBodyAcc-arCoeff()-X,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration    X axis component
##
## Variable number 31. Variable nametBodyAcc-arCoeff()-X,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration    X axis component
##
## Variable number 32. Variable nametBodyAcc-arCoeff()-Y,1. Variable class: numeric

```

```

## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Y axis component
##
## Variable number 33. Variable nametBodyAcc-arCoeff()-Y,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Y axis component
##
## Variable number 34. Variable nametBodyAcc-arCoeff()-Y,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Y axis component
##
## Variable number 35. Variable nametBodyAcc-arCoeff()-Y,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Y axis component
##
## Variable number 36. Variable nametBodyAcc-arCoeff()-Z,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Z axis component
##
## Variable number 37. Variable nametBodyAcc-arCoeff()-Z,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Z axis component
##
## Variable number 38. Variable nametBodyAcc-arCoeff()-Z,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Z axis component
##
## Variable number 39. Variable nametBodyAcc-arCoeff()-Z,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Z axis component
##
## Variable number 40. Variable nametBodyAcc-correlation()-X,Y. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration X axis component
##
## Variable number 41. Variable nametBodyAcc-correlation()-X,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration X axis component
##
## Variable number 42. Variable nametBodyAcc-correlation()-Y,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration Y axis component
##

```

```

## Variable number 43. Variable nametGravityAcc-mean()-X. Variable class: numeric
## Mean value of the
## time gravity
## acceleration X axis component
##
## Variable number 44. Variable nametGravityAcc-mean()-Y. Variable class: numeric
## Mean value of the
## time gravity
## acceleration Y axis component
##
## Variable number 45. Variable nametGravityAcc-mean()-Z. Variable class: numeric
## Mean value of the
## time gravity
## acceleration Z axis component
##
## Variable number 46. Variable nametGravityAcc-std()-X. Variable class: numeric
## Standard deviation of the
## time gravity
## acceleration X axis component
##
## Variable number 47. Variable nametGravityAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## time gravity
## acceleration Y axis component
##
## Variable number 48. Variable nametGravityAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## time gravity
## acceleration Z axis component
##
## Variable number 49. Variable nametGravityAcc-mad()-X. Variable class: numeric
## Median absolute deviation of the
## time gravity
## acceleration X axis component
##
## Variable number 50. Variable nametGravityAcc-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## time gravity
## acceleration Y axis component
##
## Variable number 51. Variable nametGravityAcc-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## time gravity
## acceleration Z axis component
##
## Variable number 52. Variable nametGravityAcc-max()-X. Variable class: numeric
## Largest value in array of the
## time gravity
## acceleration X axis component
##
## Variable number 53. Variable nametGravityAcc-max()-Y. Variable class: numeric
## Largest value in array of the
## time gravity
## acceleration Y axis component

```

```

##
## Variable number 54. Variable nametGravityAcc-max()-Z. Variable class: numeric
## Largest value in array of the
## time gravity
## acceleration    Z axis component
##
## Variable number 55. Variable nametGravityAcc-min()-X. Variable class: numeric
## Smallest value in array of the
## time gravity
## acceleration    X axis component
##
## Variable number 56. Variable nametGravityAcc-min()-Y. Variable class: numeric
## Smallest value in array of the
## time gravity
## acceleration    Y axis component
##
## Variable number 57. Variable nametGravityAcc-min()-Z. Variable class: numeric
## Smallest value in array of the
## time gravity
## acceleration    Z axis component
##
## Variable number 58. Variable nametGravityAcc-sma(). Variable class: numeric
## Signal magnitude area of the
## time gravity
## acceleration
##
## Variable number 59. Variable nametGravityAcc-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time gravity
## acceleration    X axis component
##
## Variable number 60. Variable nametGravityAcc-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time gravity
## acceleration    Y axis component
##
## Variable number 61. Variable nametGravityAcc-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time gravity
## acceleration    Z axis component
##
## Variable number 62. Variable nametGravityAcc-iqr()-X. Variable class: numeric
## Interquartile range  of the
## time gravity
## acceleration    X axis component
##
## Variable number 63. Variable nametGravityAcc-iqr()-Y. Variable class: numeric
## Interquartile range  of the
## time gravity
## acceleration    Y axis component
##
## Variable number 64. Variable nametGravityAcc-iqr()-Z. Variable class: numeric
## Interquartile range  of the
## time gravity

```

```

## acceleration    Z axis component
##
## Variable number 65. Variable nametGravityAcc-entropy()-X. Variable class: numeric
## Signal entropy of the
## time gravity
## acceleration    X axis component
##
## Variable number 66. Variable nametGravityAcc-entropy()-Y. Variable class: numeric
## Signal entropy of the
## time gravity
## acceleration    Y axis component
##
## Variable number 67. Variable nametGravityAcc-entropy()-Z. Variable class: numeric
## Signal entropy of the
## time gravity
## acceleration    Z axis component
##
## Variable number 68. Variable nametGravityAcc-arCoeff()-X,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    X axis component
##
## Variable number 69. Variable nametGravityAcc-arCoeff()-X,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    X axis component
##
## Variable number 70. Variable nametGravityAcc-arCoeff()-X,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    X axis component
##
## Variable number 71. Variable nametGravityAcc-arCoeff()-X,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    X axis component
##
## Variable number 72. Variable nametGravityAcc-arCoeff()-Y,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    Y axis component
##
## Variable number 73. Variable nametGravityAcc-arCoeff()-Y,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    Y axis component
##
## Variable number 74. Variable nametGravityAcc-arCoeff()-Y,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration    Y axis component
##
## Variable number 75. Variable nametGravityAcc-arCoeff()-Y,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the

```



```

## time gravity
## acceleration Y axis component
##
## Variable number 76. Variable nametGravityAcc-arCoeff()-Z,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration Z axis component
##
## Variable number 77. Variable nametGravityAcc-arCoeff()-Z,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration Z axis component
##
## Variable number 78. Variable nametGravityAcc-arCoeff()-Z,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration Z axis component
##
## Variable number 79. Variable nametGravityAcc-arCoeff()-Z,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time gravity
## acceleration Z axis component
##
## Variable number 80. Variable nametGravityAcc-correlation()-X,Y. Variable class: numeric
## correlation coefficient between two signals of the
## time gravity
## acceleration X axis component
##
## Variable number 81. Variable nametGravityAcc-correlation()-X,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time gravity
## acceleration X axis component
##
## Variable number 82. Variable nametGravityAcc-correlation()-Y,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time gravity
## acceleration Y axis component
##
## Variable number 83. Variable nametBodyAccJerk-mean()-X. Variable class: numeric
## Mean value of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 84. Variable nametBodyAccJerk-mean()-Y. Variable class: numeric
## Mean value of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 85. Variable nametBodyAccJerk-mean()-Z. Variable class: numeric
## Mean value of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 86. Variable nametBodyAccJerk-std()-X. Variable class: numeric

```

```

## Standard deviation of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 87. Variable nametBodyAccJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 88. Variable nametBodyAccJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 89. Variable nametBodyAccJerk-mad()-X. Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 90. Variable nametBodyAccJerk-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 91. Variable nametBodyAccJerk-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 92. Variable nametBodyAccJerk-max()-X. Variable class: numeric
## Largest value in array of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 93. Variable nametBodyAccJerk-max()-Y. Variable class: numeric
## Largest value in array of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 94. Variable nametBodyAccJerk-max()-Z. Variable class: numeric
## Largest value in array of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 95. Variable nametBodyAccJerk-min()-X. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 96. Variable nametBodyAccJerk-min()-Y. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration Jerk signals Y axis component
##

```

```

## Variable number 97. Variable nametBodyAccJerk-min()-Z. Variable class: numeric
## Smallest value in array of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 98. Variable nametBodyAccJerk-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## acceleration Jerk signals
##
## Variable number 99. Variable nametBodyAccJerk-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 100. Variable nametBodyAccJerk-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 101. Variable nametBodyAccJerk-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 102. Variable nametBodyAccJerk-iqr()-X. Variable class: numeric
## Interquartile range of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 103. Variable nametBodyAccJerk-iqr()-Y. Variable class: numeric
## Interquartile range of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 104. Variable nametBodyAccJerk-iqr()-Z. Variable class: numeric
## Interquartile range of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 105. Variable nametBodyAccJerk-entropy()-X. Variable class: numeric
## Signal entropy of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 106. Variable nametBodyAccJerk-entropy()-Y. Variable class: numeric
## Signal entropy of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 107. Variable nametBodyAccJerk-entropy()-Z. Variable class: numeric
## Signal entropy of the
## time body
## acceleration Jerk signals Z axis component

```

```

##
## Variable number 108. Variable nametBodyAccJerk-arCoeff()-X,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 109. Variable nametBodyAccJerk-arCoeff()-X,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 110. Variable nametBodyAccJerk-arCoeff()-X,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 111. Variable nametBodyAccJerk-arCoeff()-X,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 112. Variable nametBodyAccJerk-arCoeff()-Y,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 113. Variable nametBodyAccJerk-arCoeff()-Y,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 114. Variable nametBodyAccJerk-arCoeff()-Y,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 115. Variable nametBodyAccJerk-arCoeff()-Y,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 116. Variable nametBodyAccJerk-arCoeff()-Z,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 117. Variable nametBodyAccJerk-arCoeff()-Z,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 118. Variable nametBodyAccJerk-arCoeff()-Z,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body

```

```

## acceleration Jerk signals Z axis component
##
## Variable number 119. Variable nametBodyAccJerk-arCoeff()-Z,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## acceleration Jerk signals Z axis component
##
## Variable number 120. Variable nametBodyAccJerk-correlation()-X,Y. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 121. Variable nametBodyAccJerk-correlation()-X,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration Jerk signals X axis component
##
## Variable number 122. Variable nametBodyAccJerk-correlation()-Y,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## acceleration Jerk signals Y axis component
##
## Variable number 123. Variable nametBodyGyro-mean()-X. Variable class: numeric
## Mean value of the
## time body
## gyroscope X axis component
##
## Variable number 124. Variable nametBodyGyro-mean()-Y. Variable class: numeric
## Mean value of the
## time body
## gyroscope Y axis component
##
## Variable number 125. Variable nametBodyGyro-mean()-Z. Variable class: numeric
## Mean value of the
## time body
## gyroscope Z axis component
##
## Variable number 126. Variable nametBodyGyro-std()-X. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope X axis component
##
## Variable number 127. Variable nametBodyGyro-std()-Y. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Y axis component
##
## Variable number 128. Variable nametBodyGyro-std()-Z. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Z axis component
##
## Variable number 129. Variable nametBodyGyro-mad()-X. Variable class: numeric
## Median absolute deviation of the

```

```

## time body
## gyroscope X axis component
##
## Variable number 130. Variable nametBodyGyro-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope Y axis component
##
## Variable number 131. Variable nametBodyGyro-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope Z axis component
##
## Variable number 132. Variable nametBodyGyro-max()-X. Variable class: numeric
## Largest value in array of the
## time body
## gyroscope X axis component
##
## Variable number 133. Variable nametBodyGyro-max()-Y. Variable class: numeric
## Largest value in array of the
## time body
## gyroscope Y axis component
##
## Variable number 134. Variable nametBodyGyro-max()-Z. Variable class: numeric
## Largest value in array of the
## time body
## gyroscope Z axis component
##
## Variable number 135. Variable nametBodyGyro-min()-X. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope X axis component
##
## Variable number 136. Variable nametBodyGyro-min()-Y. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Y axis component
##
## Variable number 137. Variable nametBodyGyro-min()-Z. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Z axis component
##
## Variable number 138. Variable nametBodyGyro-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## gyroscope
##
## Variable number 139. Variable nametBodyGyro-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## gyroscope X axis component
##
## Variable number 140. Variable nametBodyGyro-energy()-Y. Variable class: numeric

```

```

## Energy measure. Sum of the squares divided by the number of values.  of the
## time body
## gyroscope Y axis component
##
## Variable number 141. Variable nametBodyGyro-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## time body
## gyroscope Z axis component
##
## Variable number 142. Variable nametBodyGyro-iqr()-X. Variable class: numeric
## Interquartile range of the
## time body
## gyroscope X axis component
##
## Variable number 143. Variable nametBodyGyro-iqr()-Y. Variable class: numeric
## Interquartile range of the
## time body
## gyroscope Y axis component
##
## Variable number 144. Variable nametBodyGyro-iqr()-Z. Variable class: numeric
## Interquartile range of the
## time body
## gyroscope Z axis component
##
## Variable number 145. Variable nametBodyGyro-entropy()-X. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope X axis component
##
## Variable number 146. Variable nametBodyGyro-entropy()-Y. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Y axis component
##
## Variable number 147. Variable nametBodyGyro-entropy()-Z. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Z axis component
##
## Variable number 148. Variable nametBodyGyro-arCoeff()-X,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope X axis component
##
## Variable number 149. Variable nametBodyGyro-arCoeff()-X,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope X axis component
##
## Variable number 150. Variable nametBodyGyro-arCoeff()-X,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope X axis component
##

```

```

## Variable number 151. Variable nametBodyGyro-arCoeff()-X,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope X axis component
##
## Variable number 152. Variable nametBodyGyro-arCoeff()-Y,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Y axis component
##
## Variable number 153. Variable nametBodyGyro-arCoeff()-Y,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Y axis component
##
## Variable number 154. Variable nametBodyGyro-arCoeff()-Y,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Y axis component
##
## Variable number 155. Variable nametBodyGyro-arCoeff()-Y,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Y axis component
##
## Variable number 156. Variable nametBodyGyro-arCoeff()-Z,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Z axis component
##
## Variable number 157. Variable nametBodyGyro-arCoeff()-Z,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Z axis component
##
## Variable number 158. Variable nametBodyGyro-arCoeff()-Z,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Z axis component
##
## Variable number 159. Variable nametBodyGyro-arCoeff()-Z,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Z axis component
##
## Variable number 160. Variable nametBodyGyro-correlation()-X,Y. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope X axis component
##
## Variable number 161. Variable nametBodyGyro-correlation()-X,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope X axis component

```



```

##
## Variable number 162. Variable nametBodyGyro-correlation()-Y,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope Y axis component
##
## Variable number 163. Variable nametBodyGyroJerk-mean()-X. Variable class: numeric
## Mean value of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 164. Variable nametBodyGyroJerk-mean()-Y. Variable class: numeric
## Mean value of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 165. Variable nametBodyGyroJerk-mean()-Z. Variable class: numeric
## Mean value of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 166. Variable nametBodyGyroJerk-std()-X. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 167. Variable nametBodyGyroJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 168. Variable nametBodyGyroJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 169. Variable nametBodyGyroJerk-mad()-X. Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 170. Variable nametBodyGyroJerk-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 171. Variable nametBodyGyroJerk-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 172. Variable nametBodyGyroJerk-max()-X. Variable class: numeric
## Largest value in array of the
## time body

```

```

## gyroscope Jerk signals X axis component
##
## Variable number 173. Variable nametBodyGyroJerk-max()-Y. Variable class: numeric
## Largest value in array of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 174. Variable nametBodyGyroJerk-max()-Z. Variable class: numeric
## Largest value in array of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 175. Variable nametBodyGyroJerk-min()-X. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 176. Variable nametBodyGyroJerk-min()-Y. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 177. Variable nametBodyGyroJerk-min()-Z. Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 178. Variable nametBodyGyroJerk-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## gyroscope Jerk signals
##
## Variable number 179. Variable nametBodyGyroJerk-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 180. Variable nametBodyGyroJerk-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 181. Variable nametBodyGyroJerk-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 182. Variable nametBodyGyroJerk-iqr()-X. Variable class: numeric
## Interquartile range of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 183. Variable nametBodyGyroJerk-iqr()-Y. Variable class: numeric
## Interquartile range of the

```

```

## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 184. Variable nametBodyGyroJerk-iqr()-Z. Variable class: numeric
## Interquartile range of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 185. Variable nametBodyGyroJerk-entropy()-X. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 186. Variable nametBodyGyroJerk-entropy()-Y. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 187. Variable nametBodyGyroJerk-entropy()-Z. Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 188. Variable nametBodyGyroJerk-arCoeff()-X,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 189. Variable nametBodyGyroJerk-arCoeff()-X,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 190. Variable nametBodyGyroJerk-arCoeff()-X,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 191. Variable nametBodyGyroJerk-arCoeff()-X,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 192. Variable nametBodyGyroJerk-arCoeff()-Y,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 193. Variable nametBodyGyroJerk-arCoeff()-Y,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 194. Variable nametBodyGyroJerk-arCoeff()-Y,3. Variable class: numeric

```

```

## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 195. Variable nametBodyGyroJerk-arCoeff()-Y,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 196. Variable nametBodyGyroJerk-arCoeff()-Z,1. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 197. Variable nametBodyGyroJerk-arCoeff()-Z,2. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 198. Variable nametBodyGyroJerk-arCoeff()-Z,3. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 199. Variable nametBodyGyroJerk-arCoeff()-Z,4. Variable class: numeric
## Autorregresion coefficients with Burg order equal to 4 of the
## time body
## gyroscope Jerk signals Z axis component
##
## Variable number 200. Variable nametBodyGyroJerk-correlation()-X,Y. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 201. Variable nametBodyGyroJerk-correlation()-X,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope Jerk signals X axis component
##
## Variable number 202. Variable nametBodyGyroJerk-correlation()-Y,Z. Variable class: numeric
## correlation coefficient between two signals of the
## time body
## gyroscope Jerk signals Y axis component
##
## Variable number 203. Variable nametBodyAccMag-mean(). Variable class: numeric
## Mean value of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 204. Variable nametBodyAccMag-std(). Variable class: numeric
## Standard deviation of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##

```

```

## Variable number 205. Variable nametBodyAccMag-mad(). Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 206. Variable nametBodyAccMag-max(). Variable class: numeric
## Largest value in array of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 207. Variable nametBodyAccMag-min(). Variable class: numeric
## Smallest value in array of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 208. Variable nametBodyAccMag-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 209. Variable nametBodyAccMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 210. Variable nametBodyAccMag-iqr(). Variable class: numeric
## Interquartile range of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 211. Variable nametBodyAccMag-entropy(). Variable class: numeric
## Signal entropy of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 212. Variable nametBodyAccMag-arCoeff()1. Variable class: numeric
## of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 213. Variable nametBodyAccMag-arCoeff()2. Variable class: numeric
## of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 214. Variable nametBodyAccMag-arCoeff()3. Variable class: numeric
## of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 215. Variable nametBodyAccMag-arCoeff()4. Variable class: numeric
## of the
## time body
## acceleration magnitude (calculated using the Euclidean norm)

```

```

##
## Variable number 216. Variable nametGravityAccMag-mean(). Variable class: numeric
## Mean value of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 217. Variable nametGravityAccMag-std(). Variable class: numeric
## Standard deviation of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 218. Variable nametGravityAccMag-mad(). Variable class: numeric
## Median absolute deviation of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 219. Variable nametGravityAccMag-max(). Variable class: numeric
## Largest value in array of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 220. Variable nametGravityAccMag-min(). Variable class: numeric
## Smallest value in array of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 221. Variable nametGravityAccMag-sma(). Variable class: numeric
## Signal magnitude area of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 222. Variable nametGravityAccMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 223. Variable nametGravityAccMag-iqr(). Variable class: numeric
## Interquartile range of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 224. Variable nametGravityAccMag-entropy(). Variable class: numeric
## Signal entropy of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 225. Variable nametGravityAccMag-arCoeff()1. Variable class: numeric
## of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 226. Variable nametGravityAccMag-arCoeff()2. Variable class: numeric
## of the
## time gravity

```

```

## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 227. Variable nametGravityAccMag-arCoeff()3. Variable class: numeric
## of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 228. Variable nametGravityAccMag-arCoeff()4. Variable class: numeric
## of the
## time gravity
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 229. Variable nametBodyAccJerkMag-mean(). Variable class: numeric
## Mean value of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 230. Variable nametBodyAccJerkMag-std(). Variable class: numeric
## Standard deviation of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 231. Variable nametBodyAccJerkMag-mad(). Variable class: numeric
## Median absolute deviation of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 232. Variable nametBodyAccJerkMag-max(). Variable class: numeric
## Largest value in array of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 233. Variable nametBodyAccJerkMag-min(). Variable class: numeric
## Smallest value in array of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 234. Variable nametBodyAccJerkMag-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 235. Variable nametBodyAccJerkMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 236. Variable nametBodyAccJerkMag-iqr(). Variable class: numeric
## Interquartile range of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 237. Variable nametBodyAccJerkMag-entropy(). Variable class: numeric
## Signal entropy of the

```

```

## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 238. Variable nametBodyAccJerkMag-arCoeff()1. Variable class: numeric
## of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 239. Variable nametBodyAccJerkMag-arCoeff()2. Variable class: numeric
## of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 240. Variable nametBodyAccJerkMag-arCoeff()3. Variable class: numeric
## of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 241. Variable nametBodyAccJerkMag-arCoeff()4. Variable class: numeric
## of the
## time body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 242. Variable nametBodyGyroMag-mean(). Variable class: numeric
## Mean value of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 243. Variable nametBodyGyroMag-std(). Variable class: numeric
## Standard deviation of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 244. Variable nametBodyGyroMag-mad(). Variable class: numeric
## Median absolute deviation of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 245. Variable nametBodyGyroMag-max(). Variable class: numeric
## Largest value in array of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 246. Variable nametBodyGyroMag-min(). Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 247. Variable nametBodyGyroMag-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 248. Variable nametBodyGyroMag-energy(). Variable class: numeric

```



```

## Energy measure. Sum of the squares divided by the number of values.  of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 249. Variable nametBodyGyroMag-iqr(). Variable class: numeric
## Interquartile range  of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 250. Variable nametBodyGyroMag-entropy(). Variable class: numeric
## Signal entropy of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 251. Variable nametBodyGyroMag-arCoeff()1. Variable class: numeric
## of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 252. Variable nametBodyGyroMag-arCoeff()2. Variable class: numeric
## of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 253. Variable nametBodyGyroMag-arCoeff()3. Variable class: numeric
## of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 254. Variable nametBodyGyroMag-arCoeff()4. Variable class: numeric
## of the
## time body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 255. Variable nametBodyGyroJerkMag-mean(). Variable class: numeric
## Mean value of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 256. Variable nametBodyGyroJerkMag-std(). Variable class: numeric
## Standard deviation of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 257. Variable nametBodyGyroJerkMag-mad(). Variable class: numeric
## Median absolute deviation  of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 258. Variable nametBodyGyroJerkMag-max(). Variable class: numeric
## Largest value in array of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##

```

```

## Variable number 259. Variable nametBodyGyroJerkMag-min(). Variable class: numeric
## Smallest value in array of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 260. Variable nametBodyGyroJerkMag-sma(). Variable class: numeric
## Signal magnitude area of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 261. Variable nametBodyGyroJerkMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 262. Variable nametBodyGyroJerkMag-iqr(). Variable class: numeric
## Interquartile range of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 263. Variable nametBodyGyroJerkMag-entropy(). Variable class: numeric
## Signal entropy of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 264. Variable nametBodyGyroJerkMag-arCoeff()1. Variable class: numeric
## of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 265. Variable nametBodyGyroJerkMag-arCoeff()2. Variable class: numeric
## of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 266. Variable nametBodyGyroJerkMag-arCoeff()3. Variable class: numeric
## of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 267. Variable nametBodyGyroJerkMag-arCoeff()4. Variable class: numeric
## of the
## time body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 268. Variable namefBodyAcc-mean()-X. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 269. Variable namefBodyAcc-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component

```

```

##
## Variable number 270. Variable namefBodyAcc-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 271. Variable namefBodyAcc-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 272. Variable namefBodyAcc-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 273. Variable namefBodyAcc-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 274. Variable namefBodyAcc-mad()-X. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 275. Variable namefBodyAcc-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 276. Variable namefBodyAcc-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 277. Variable namefBodyAcc-max()-X. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 278. Variable namefBodyAcc-max()-Y. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 279. Variable namefBodyAcc-max()-Z. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 280. Variable namefBodyAcc-min()-X. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```

```

## acceleration    X axis component
##
## Variable number 281. Variable namefBodyAcc-min()-Y. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Y axis component
##
## Variable number 282. Variable namefBodyAcc-min()-Z. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Z axis component
##
## Variable number 283. Variable namefBodyAcc-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 284. Variable namefBodyAcc-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    X axis component
##
## Variable number 285. Variable namefBodyAcc-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Y axis component
##
## Variable number 286. Variable namefBodyAcc-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Z axis component
##
## Variable number 287. Variable namefBodyAcc-iqr()-X. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    X axis component
##
## Variable number 288. Variable namefBodyAcc-iqr()-Y. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Y axis component
##
## Variable number 289. Variable namefBodyAcc-iqr()-Z. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    Z axis component
##
## Variable number 290. Variable namefBodyAcc-entropy()-X. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration    X axis component
##
## Variable number 291. Variable namefBodyAcc-entropy()-Y. Variable class: numeric
## Signal entropy of the

```

```

## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 292. Variable namefBodyAcc-entropy()-Z. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 293. Variable namefBodyAcc-maxInds-X. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 294. Variable namefBodyAcc-maxInds-Y. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 295. Variable namefBodyAcc-maxInds-Z. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 296. Variable namefBodyAcc-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 297. Variable namefBodyAcc-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 298. Variable namefBodyAcc-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 299. Variable namefBodyAcc-skewness()-X. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 300. Variable namefBodyAcc-kurtosis()-X. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration X axis component
##
## Variable number 301. Variable namefBodyAcc-skewness()-Y. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 302. Variable namefBodyAcc-kurtosis()-Y. Variable class: numeric

```

```

## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Y axis component
##
## Variable number 303. Variable namefBodyAcc-skewness()-Z. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 304. Variable namefBodyAcc-kurtosis()-Z. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Z axis component
##
## Variable number 305. Variable namefBodyAcc-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 306. Variable namefBodyAcc-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 307. Variable namefBodyAcc-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 308. Variable namefBodyAcc-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 309. Variable namefBodyAcc-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 310. Variable namefBodyAcc-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 311. Variable namefBodyAcc-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 312. Variable namefBodyAcc-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##

```

```

## Variable number 313. Variable namefBodyAcc-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 314. Variable namefBodyAcc-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 315. Variable namefBodyAcc-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 316. Variable namefBodyAcc-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 317. Variable namefBodyAcc-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 318. Variable namefBodyAcc-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 319. Variable namefBodyAcc-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 320. Variable namefBodyAcc-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 321. Variable namefBodyAcc-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 322. Variable namefBodyAcc-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 323. Variable namefBodyAcc-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration

```

```

##
## Variable number 324. Variable namefBodyAcc-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 325. Variable namefBodyAcc-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 326. Variable namefBodyAcc-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 327. Variable namefBodyAcc-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 328. Variable namefBodyAcc-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 329. Variable namefBodyAcc-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 330. Variable namefBodyAcc-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 331. Variable namefBodyAcc-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 332. Variable namefBodyAcc-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 333. Variable namefBodyAcc-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 334. Variable namefBodyAcc-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```



```

## acceleration
##
## Variable number 335. Variable namefBodyAcc-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 336. Variable namefBodyAcc-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 337. Variable namefBodyAcc-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 338. Variable namefBodyAcc-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 339. Variable namefBodyAcc-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 340. Variable namefBodyAcc-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 341. Variable namefBodyAcc-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 342. Variable namefBodyAcc-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 343. Variable namefBodyAcc-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 344. Variable namefBodyAcc-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 345. Variable namefBodyAcc-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the

```

```

## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 346. Variable namefBodyAcc-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 347. Variable namefBodyAccJerk-mean()-X. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 348. Variable namefBodyAccJerk-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 349. Variable namefBodyAccJerk-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 350. Variable namefBodyAccJerk-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 351. Variable namefBodyAccJerk-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 352. Variable namefBodyAccJerk-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 353. Variable namefBodyAccJerk-mad()-X. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 354. Variable namefBodyAccJerk-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 355. Variable namefBodyAccJerk-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 356. Variable namefBodyAccJerk-max()-X. Variable class: numeric

```

```

## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 357. Variable namefBodyAccJerk-max()-Y. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 358. Variable namefBodyAccJerk-max()-Z. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 359. Variable namefBodyAccJerk-min()-X. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 360. Variable namefBodyAccJerk-min()-Y. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 361. Variable namefBodyAccJerk-min()-Z. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 362. Variable namefBodyAccJerk-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 363. Variable namefBodyAccJerk-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 364. Variable namefBodyAccJerk-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 365. Variable namefBodyAccJerk-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 366. Variable namefBodyAccJerk-iqr()-X. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##

```

```

## Variable number 367. Variable namefBodyAccJerk-iqr()-Y. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 368. Variable namefBodyAccJerk-iqr()-Z. Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 369. Variable namefBodyAccJerk-entropy()-X. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 370. Variable namefBodyAccJerk-entropy()-Y. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 371. Variable namefBodyAccJerk-entropy()-Z. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 372. Variable namefBodyAccJerk-maxInds-X. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 373. Variable namefBodyAccJerk-maxInds-Y. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 374. Variable namefBodyAccJerk-maxInds-Z. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 375. Variable namefBodyAccJerk-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 376. Variable namefBodyAccJerk-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 377. Variable namefBodyAccJerk-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component

```

```

##
## Variable number 378. Variable namefBodyAccJerk-skewness()-X. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 379. Variable namefBodyAccJerk-kurtosis()-X. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals X axis component
##
## Variable number 380. Variable namefBodyAccJerk-skewness()-Y. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 381. Variable namefBodyAccJerk-kurtosis()-Y. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Y axis component
##
## Variable number 382. Variable namefBodyAccJerk-skewness()-Z. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 383. Variable namefBodyAccJerk-kurtosis()-Z. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals Z axis component
##
## Variable number 384. Variable namefBodyAccJerk-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 385. Variable namefBodyAccJerk-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 386. Variable namefBodyAccJerk-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 387. Variable namefBodyAccJerk-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 388. Variable namefBodyAccJerk-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```

```

## acceleration Jerk signals
##
## Variable number 389. Variable namefBodyAccJerk-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 390. Variable namefBodyAccJerk-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 391. Variable namefBodyAccJerk-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 392. Variable namefBodyAccJerk-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 393. Variable namefBodyAccJerk-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 394. Variable namefBodyAccJerk-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 395. Variable namefBodyAccJerk-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 396. Variable namefBodyAccJerk-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 397. Variable namefBodyAccJerk-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 398. Variable namefBodyAccJerk-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 399. Variable namefBodyAccJerk-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the

```

```

## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 400. Variable namefBodyAccJerk-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 401. Variable namefBodyAccJerk-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 402. Variable namefBodyAccJerk-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 403. Variable namefBodyAccJerk-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 404. Variable namefBodyAccJerk-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 405. Variable namefBodyAccJerk-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 406. Variable namefBodyAccJerk-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 407. Variable namefBodyAccJerk-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 408. Variable namefBodyAccJerk-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 409. Variable namefBodyAccJerk-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 410. Variable namefBodyAccJerk-bandsEnergy()-1,24. Variable class: numeric

```

```

## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 411. Variable namefBodyAccJerk-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 412. Variable namefBodyAccJerk-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 413. Variable namefBodyAccJerk-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 414. Variable namefBodyAccJerk-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 415. Variable namefBodyAccJerk-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 416. Variable namefBodyAccJerk-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 417. Variable namefBodyAccJerk-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 418. Variable namefBodyAccJerk-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 419. Variable namefBodyAccJerk-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 420. Variable namefBodyAccJerk-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##

```



```

## Variable number 421. Variable namefBodyAccJerk-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 422. Variable namefBodyAccJerk-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 423. Variable namefBodyAccJerk-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 424. Variable namefBodyAccJerk-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 425. Variable namefBodyAccJerk-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 426. Variable namefBodyGyro-mean()-X. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 427. Variable namefBodyGyro-mean()-Y. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 428. Variable namefBodyGyro-mean()-Z. Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 429. Variable namefBodyGyro-std()-X. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 430. Variable namefBodyGyro-std()-Y. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 431. Variable namefBodyGyro-std()-Z. Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component

```

```

##
## Variable number 432. Variable namefBodyGyro-mad()-X. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 433. Variable namefBodyGyro-mad()-Y. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 434. Variable namefBodyGyro-mad()-Z. Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 435. Variable namefBodyGyro-max()-X. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 436. Variable namefBodyGyro-max()-Y. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 437. Variable namefBodyGyro-max()-Z. Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 438. Variable namefBodyGyro-min()-X. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 439. Variable namefBodyGyro-min()-Y. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 440. Variable namefBodyGyro-min()-Z. Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 441. Variable namefBodyGyro-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 442. Variable namefBodyGyro-energy()-X. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```

```

## gyroscope    X axis component
##
## Variable number 443. Variable namefBodyGyro-energy()-Y. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Y axis component
##
## Variable number 444. Variable namefBodyGyro-energy()-Z. Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values.  of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Z axis component
##
## Variable number 445. Variable namefBodyGyro-iqr()-X. Variable class: numeric
## Interquartile range  of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    X axis component
##
## Variable number 446. Variable namefBodyGyro-iqr()-Y. Variable class: numeric
## Interquartile range  of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Y axis component
##
## Variable number 447. Variable namefBodyGyro-iqr()-Z. Variable class: numeric
## Interquartile range  of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Z axis component
##
## Variable number 448. Variable namefBodyGyro-entropy()-X. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    X axis component
##
## Variable number 449. Variable namefBodyGyro-entropy()-Y. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Y axis component
##
## Variable number 450. Variable namefBodyGyro-entropy()-Z. Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Z axis component
##
## Variable number 451. Variable namefBodyGyro-maxInds-X. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    X axis component
##
## Variable number 452. Variable namefBodyGyro-maxInds-Y. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope    Y axis component
##
## Variable number 453. Variable namefBodyGyro-maxInds-Z. Variable class: numeric
## of the

```

```

## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 454. Variable namefBodyGyro-meanFreq()-X. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 455. Variable namefBodyGyro-meanFreq()-Y. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 456. Variable namefBodyGyro-meanFreq()-Z. Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 457. Variable namefBodyGyro-skewness()-X. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 458. Variable namefBodyGyro-kurtosis()-X. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope X axis component
##
## Variable number 459. Variable namefBodyGyro-skewness()-Y. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 460. Variable namefBodyGyro-kurtosis()-Y. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Y axis component
##
## Variable number 461. Variable namefBodyGyro-skewness()-Z. Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 462. Variable namefBodyGyro-kurtosis()-Z. Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Z axis component
##
## Variable number 463. Variable namefBodyGyro-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 464. Variable namefBodyGyro-bandsEnergy()-9,16. Variable class: numeric

```

```

## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 465. Variable namefBodyGyro-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 466. Variable namefBodyGyro-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 467. Variable namefBodyGyro-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 468. Variable namefBodyGyro-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 469. Variable namefBodyGyro-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 470. Variable namefBodyGyro-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 471. Variable namefBodyGyro-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 472. Variable namefBodyGyro-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 473. Variable namefBodyGyro-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 474. Variable namefBodyGyro-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##

```

```

## Variable number 475. Variable namefBodyGyro-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 476. Variable namefBodyGyro-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 477. Variable namefBodyGyro-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 478. Variable namefBodyGyro-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 479. Variable namefBodyGyro-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 480. Variable namefBodyGyro-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 481. Variable namefBodyGyro-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 482. Variable namefBodyGyro-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 483. Variable namefBodyGyro-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 484. Variable namefBodyGyro-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 485. Variable namefBodyGyro-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope

```

```

##
## Variable number 486. Variable namefBodyGyro-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 487. Variable namefBodyGyro-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 488. Variable namefBodyGyro-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 489. Variable namefBodyGyro-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 490. Variable namefBodyGyro-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 491. Variable namefBodyGyro-bandsEnergy()-1,8. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 492. Variable namefBodyGyro-bandsEnergy()-9,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 493. Variable namefBodyGyro-bandsEnergy()-17,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 494. Variable namefBodyGyro-bandsEnergy()-25,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 495. Variable namefBodyGyro-bandsEnergy()-33,40. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 496. Variable namefBodyGyro-bandsEnergy()-41,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```

```

## gyroscope
##
## Variable number 497. Variable namefBodyGyro-bandsEnergy()-49,56. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 498. Variable namefBodyGyro-bandsEnergy()-57,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 499. Variable namefBodyGyro-bandsEnergy()-1,16. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 500. Variable namefBodyGyro-bandsEnergy()-17,32. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 501. Variable namefBodyGyro-bandsEnergy()-33,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 502. Variable namefBodyGyro-bandsEnergy()-49,64. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 503. Variable namefBodyGyro-bandsEnergy()-1,24. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 504. Variable namefBodyGyro-bandsEnergy()-25,48. Variable class: numeric
## Energy of a frequency interval within the 64 bins of the FFT of each window. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 505. Variable namefBodyAccMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 506. Variable namefBodyAccMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 507. Variable namefBodyAccMag-mad(). Variable class: numeric
## Median absolute deviation of the

```



```

## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 508. Variable namefBodyAccMag-max(). Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 509. Variable namefBodyAccMag-min(). Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 510. Variable namefBodyAccMag-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 511. Variable namefBodyAccMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 512. Variable namefBodyAccMag-iqr(). Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 513. Variable namefBodyAccMag-entropy(). Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 514. Variable namefBodyAccMag-maxInds. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 515. Variable namefBodyAccMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 516. Variable namefBodyAccMag-skewness(). Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 517. Variable namefBodyAccMag-kurtosis(). Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration magnitude (calculated using the Euclidean norm)
##
## Variable number 518. Variable namefBodyBodyAccJerkMag-mean(). Variable class: numeric

```

```

## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 519. Variable namefBodyBodyAccJerkMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 520. Variable namefBodyBodyAccJerkMag-mad(). Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 521. Variable namefBodyBodyAccJerkMag-max(). Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 522. Variable namefBodyBodyAccJerkMag-min(). Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 523. Variable namefBodyBodyAccJerkMag-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 524. Variable namefBodyBodyAccJerkMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 525. Variable namefBodyBodyAccJerkMag-iqr(). Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 526. Variable namefBodyBodyAccJerkMag-entropy(). Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 527. Variable namefBodyBodyAccJerkMag-maxInds. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 528. Variable namefBodyBodyAccJerkMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##

```

```

## Variable number 529. Variable namefBodyBodyAccJerkMag-skewness(). Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 530. Variable namefBodyBodyAccJerkMag-kurtosis(). Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 531. Variable namefBodyBodyGyroMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 532. Variable namefBodyBodyGyroMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 533. Variable namefBodyBodyGyroMag-mad(). Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 534. Variable namefBodyBodyGyroMag-max(). Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 535. Variable namefBodyBodyGyroMag-min(). Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 536. Variable namefBodyBodyGyroMag-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 537. Variable namefBodyBodyGyroMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 538. Variable namefBodyBodyGyroMag-iqr(). Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 539. Variable namefBodyBodyGyroMag-entropy(). Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)

```

```

##
## Variable number 540. Variable namefBodyBodyGyroMag-maxInds. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 541. Variable namefBodyBodyGyroMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 542. Variable namefBodyBodyGyroMag-skewness(). Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 543. Variable namefBodyBodyGyroMag-kurtosis(). Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope magnitude (calculated using the Euclidean norm)
##
## Variable number 544. Variable namefBodyBodyGyroJerkMag-mean(). Variable class: numeric
## Mean value of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 545. Variable namefBodyBodyGyroJerkMag-std(). Variable class: numeric
## Standard deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 546. Variable namefBodyBodyGyroJerkMag-mad(). Variable class: numeric
## Median absolute deviation of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 547. Variable namefBodyBodyGyroJerkMag-max(). Variable class: numeric
## Largest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 548. Variable namefBodyBodyGyroJerkMag-min(). Variable class: numeric
## Smallest value in array of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 549. Variable namefBodyBodyGyroJerkMag-sma(). Variable class: numeric
## Signal magnitude area of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 550. Variable namefBodyBodyGyroJerkMag-energy(). Variable class: numeric
## Energy measure. Sum of the squares divided by the number of values. of the
## frequency domain signal (after applying the Fast Fourier Transform) body

```

```

## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 551. Variable namefBodyBodyGyroJerkMag-iqr(). Variable class: numeric
## Interquartile range of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 552. Variable namefBodyBodyGyroJerkMag-entropy(). Variable class: numeric
## Signal entropy of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 553. Variable namefBodyBodyGyroJerkMag-maxInds. Variable class: numeric
## of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 554. Variable namefBodyBodyGyroJerkMag-meanFreq(). Variable class: numeric
## Weighted average of the frequency components to obtain a mean frequency of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 555. Variable namefBodyBodyGyroJerkMag-skewness(). Variable class: numeric
## skewness of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 556. Variable namefBodyBodyGyroJerkMag-kurtosis(). Variable class: numeric
## kurtosis of the frequency domain signal of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals magnitude (calculated using the Euclidean norm)
##
## Variable number 557. Variable nameangle(tBodyAccMean,gravity). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration
##
## Variable number 558. Variable nameangle(tBodyAccJerkMean),gravityMean). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## acceleration Jerk signals
##
## Variable number 559. Variable nameangle(tBodyGyroMean,gravityMean). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 560. Variable nameangle(tBodyGyroJerkMean,gravityMean). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope Jerk signals
##
## Variable number 561. Variable nameangle(X,gravityMean). Variable class: numeric
## Mean of the

```

```
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 562. Variable nameangle(Y,gravityMean). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
##
## Variable number 563. Variable nameangle(Z,gravityMean). Variable class: numeric
## Mean of the
## frequency domain signal (after applying the Fast Fourier Transform) body
## gyroscope
```