1 ==>Method 1 : power\_spectrum ==> Compute the Fourrier Power in the frequency bands defined by the user

init\_method(1).method\_name='power\_spectrum';

2 ==>Method 2 : Fractal

init\_method(2).method\_name='amp\_fractal\_katz';

3 ==>Method 3 : Sample Entropy

init\_method(3).method\_name='amp\_sample\_entropy';

4 ==> Method 4 : mean value

init\_method(4).method\_name='amp\_mean';

5 ==> Method 5 : energy time domain

init\_method(5).method\_name='amp\_energy';

6 ==> Method 6 : Kurtisis

init\_method(6).method\_name='amp\_kurtosis';

7 ==> Method 7 : Skewness

init\_method(7).method\_name='amp\_skewness';

8 ==> Method 8 : minmax : compteur de faible pente

init\_method(8).method\_name='amp\_low\_slope';

9 ==> Method 9 : slop signe change !!

init\_method(9).method\_name='amp\_slope\_change';

10 ==> Method 10 : Wave length

init\_method(10).method\_name='amp\_wavelength';

11 ==> Method 11 : MASV

init\_method(11).method\_name='amp\_msav';

12 ==> Method 12 : mean enveleoppe

init\_method(12).method\_name='amp\_enveloppe\_mean';

13 ==> Method 13 : standard devatiation enveleoppe

init\_method(13).method\_name='amp\_enveloppe\_std';

14 ==> Method 14 : kurtosis devatiation enveleoppe

init\_method(14).method\_name='amp\_enveloppe\_kurtosis';

15 ==> Method 15 : variance enveleoppe

init\_method(15).method\_name='amp\_enveloppe\_var';

16 ==> Method 16 : skewness devatiation enveleoppe

init\_method(16).method\_name='amp\_enveloppe\_skewness';

17 ==> Method 17 : Zero Crossing

init\_method(17).method\_name='amp\_zero\_crossing';

18 ==> Method 18 : slope\_signe\_change\_cpt

init\_method(18).method\_name='amp\_slope\_signe\_change';

19 ==> Method 19 : entropy time domaine

init\_method(19).method\_name='amp\_gonzalez\_entropy';

20 ==> Method 20 :

init\_method(20).method\_name='amp\_variance';

21 ==> Method 21 : fractal\_dimension

init\_method(21).method\_name='amp\_fractal\_higuchi';

22 ==> Method 22 : fractal\_dimension () pblem d execution faut verifier le code

init\_method(22).method\_name='amp\_fractal\_haussdorf';

23 ==> Method 23 : mean\_time\_between\_oscillation

init\_method(23).method\_name='amp\_mean\_time\_bo';

24 ==> Method 24 : mean\_apmlitude\_between\_oscillation

init\_method(24).method\_name='mean\_amplitude\_between\_oscillation';

%% THE METHODS FROM 25 to 35 are reserved for the wavelet transform's methods

25 ==> Method 25 : wavelette transform

if init\_parameter.wavelette\_transform==1

init\_method(25).method\_name='wavelet\_transform';

26 ==> Method 26 : wavelet kurtosis

init\_method(26).method\_name='wt\_kurtosis';

27 ==> Method 27 : wavelet standard deviations

init\_method(27).method\_name='wt\_std';

%% THE METHODS FROM 36 to 50 are reserved for the fourrier transform methods

36 ==> Method 36 : mean of norm fft

init\_method(36).method\_name='fft\_amp\_mean';

37 ==> Method 37 : std\_deviation\_fft

init\_method(37).method\_name='fft\_amp\_std';

38 ==> Method 38 : variance fft

init\_method(38).method\_name='fft\_amp\_var';

39 ==> Method 39 : Spectral flatnaess ( Wiener entropy)

init\_method(39).method\_name='spectral\_flatness';

58 ==> Method 58 : cross correlation valeur moyenne

init\_method(58).method\_name='synchro\_amp\_cross\_corr';

60 ==> Method 60 : Synchro\_phase\_locking\_value

init\_method(60).method\_name='synchro\_phase\_locking';

61 ==> Method 61 : Synchro\_phase\_index\_value (synchroindex=(mean(cos(phi1-phi2)))^2 + (mean(sin(phi1-phi2)))^2;

)

init\_method(61).method\_name='synchro\_phase\_index';

39 ==> Method 22 : std\_deviation\_fft

init\_method(22).method\_name='std\_deviation\_value';

init\_method(22).method\_out='o\_std\_deviation\_value';

init\_method(10).fc\_method\_name='Amplitude\_wavelength';

init\_method(22).method\_number=22;

12 ==> Method 12 : Enveloppe du signale, Transformé de Hilbert, mean\_norm\_enveloppe

init\_method(12).method\_name='mean\_norm\_enveloppe';

init\_method(12).method\_out='o\_mean\_norm\_enveloppe\_value';

init\_method(12).fc\_method\_name='Amplitude\_wavelength';

init\_method(12).method\_number=12;

%

% 36 ==> Method 36 : mean enveleoppe

% init\_method(36).method\_name='amp\_enveloppe\_mean';

% init\_method(36).method\_out='o\_amp\_enveloppe\_mean';

% init\_method(36).fc\_method\_name='Amplitude\_enveloppe\_mean';

% init\_method(36).method\_number=36;

%

% 37 ==> Method 37 : standard devatiation enveleoppe

% init\_method(37).method\_name='amp\_enveloppe\_std';

% init\_method(37).fc\_method\_name='Amplitude\_enveloppe\_std';

% init\_method(37).method\_out='o\_amp\_enveloppe\_std';

% init\_method(37).method\_number=37;

%

%

% 38 ==> Method 38 : kurtosis devatiation enveleoppe

% init\_method(38).method\_name='amp\_enveloppe\_kurtosis';

% init\_method(38).fc\_method\_name='Amplitude\_enveloppe\_kurtosis';

% init\_method(38).method\_out='o\_amp\_enveloppe\_kurtosis';

% init\_method(38).method\_number=38;

%

%

%

% 39 ==> Method 39 : variance enveleoppe

% init\_method(39).method\_name='amp\_enveloppe\_var';

% init\_method(39).fc\_method\_name='Amplitude\_enveloppe\_var';

% init\_method(39).method\_out='o\_amp\_enveloppe\_var';

% init\_method(39).method\_number=39;

%

% 40 ==> Method 40 : skewness devatiation enveleoppe

% init\_method(40).method\_name='amp\_enveloppe\_skewness';

% init\_method(40).fc\_method\_name='Amplitude\_enveloppe\_skewness';

% init\_method(40).method\_out='o\_amp\_enveloppe\_skewness';

% init\_method(40).method\_number=40;

41 ==> Method 41 : 41 to 50 are reserved to the Range EEG rEEG described in this paper : Peak-to-peak amplitude in neonatal brain monitoring of premature infants

% Se referer aux script range\_EGG

100 ==> Method 100 : random\_noise\_features\_1

init\_method(100).method\_name='random\_noise\_features\_1';

init\_method(100).method\_out='o\_random\_noise\_features\_1';

init\_method(100).method\_number=100;

200 ==> Method 200 : random\_noise\_features\_2

init\_method(200).method\_name='random\_noise\_features\_2';

init\_method(200).method\_out='o\_random\_noise\_features\_2';

init\_method(200).method\_number=200;