z=[1:45001];

zz=[1:10:45001];

yy= interp1(z,VarName1,zz,'spline');

Fs=5000;

NN=4501;

x=yy';

t=[1:NN];

[imf,ort,nbits]=emd2(x,t);

L=size(imf,1);

E=0;

for i=1:L;

E=sum(imf(i,:).^2).\*1/Fs+E;

end