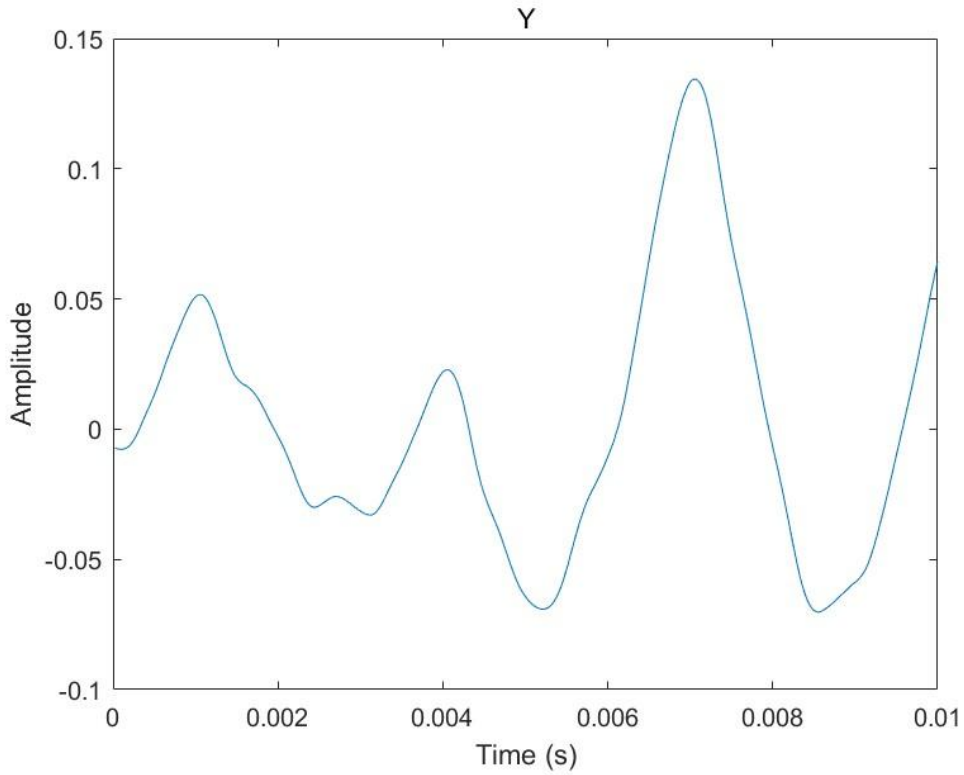
Load music, extract a clip and see waveform

```
[y, FS] = audioread("moonlight-sonata-classical-piano-241539.mp3");
y_t = y(FS*10+1:FS*20);
t = 1/FS:1/FS:0.01;
plot(t, y_t(1:length(t)));

xlabel('Time (s)');
ylabel('Amplitude');
title('Y');
```



Half the speed of the music clip and export

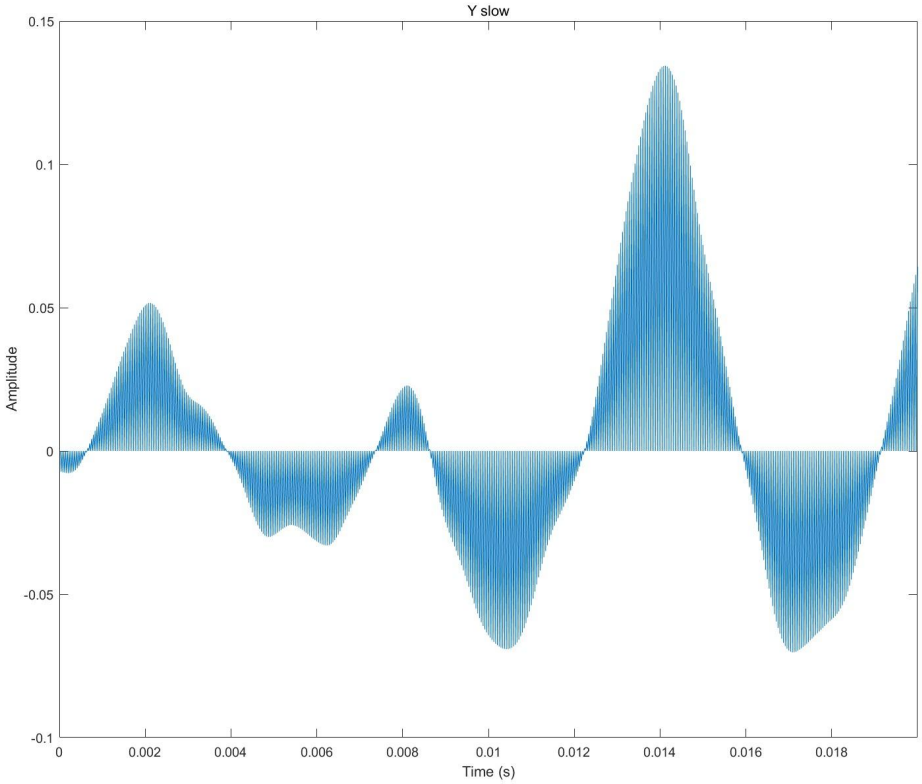
```
[y, FS] = audioread("moonlight-sonata-classical-piano-241539.mp3");
y_t = y(FS*10+1:FS*20);
t = 1/FS:1/FS:0.01;
m = length(y_t);

y_slow = zeros(1,2*m);
for i = 1:1:m
y_slow(i*2) = y_t(i);
end

t_slow = 1/FS:1/FS:0.02;

plot(t_slow, y_slow(1:length(t_slow)));
xlabel('Time (s)');
ylabel('Amplitude');
title('Y slow');
```

```
audiowrite('slow.mp4',y_slow,FS)
```



Double the speed of the music clip and export

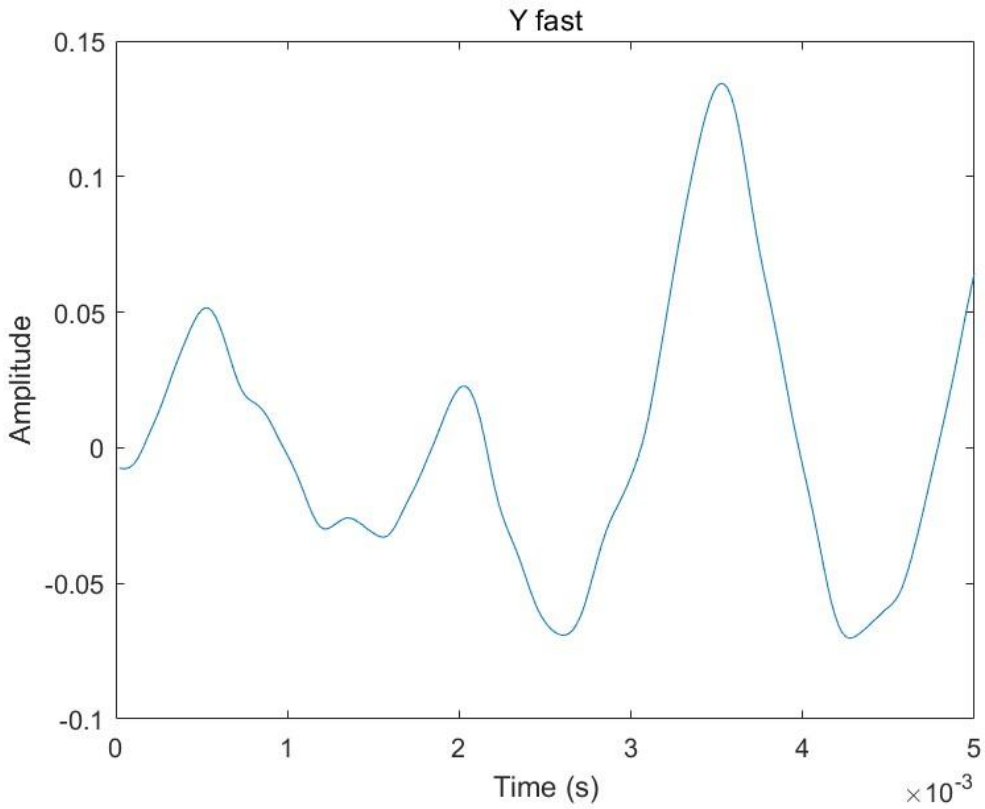
```
[y, FS] = audioread("moonlight-sonata-classical-piano-241539.mp3");
y_t = y(FS*10+1:FS*20);
t = 1/FS:1/FS:0.01;
m = length(y_t);

y_fast = zeros(1,0.5*m);
for i = 1:1:m*0.5
y_fast(i) = y_t(i*2);
end

t_fast = 1/FS:1/FS:0.005;

plot(t_fast, y_fast(1:length(t_fast)));
xlabel('Time (s)');
ylabel('Amplitude');
title('Y fast');

audiowrite('fast.mp4',y_fast,FS)
```



Export the backwards music clip

```
[y, FS] = audioread("moonlight-sonata-classical-piano-241539.mp3");
y_t = y(FS*10+1:FS*20);
t = 1/FS:1/FS:0.01;
m = length(y_t);

y_back = zeros(1,m);
for i = 1:1:m
y_back(i) = y_t(m+1-i);
end

audiowrite('backwards.mp4',y_back,FS)
```