# WHALECALL Signal analysis of a recorded blue whale call.

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Data source: Bioacoustics Research Program Cornell University Lab of Ornithology <a href="http://birds.cornell.edu/brp/">http://birds.cornell.edu/brp/</a>

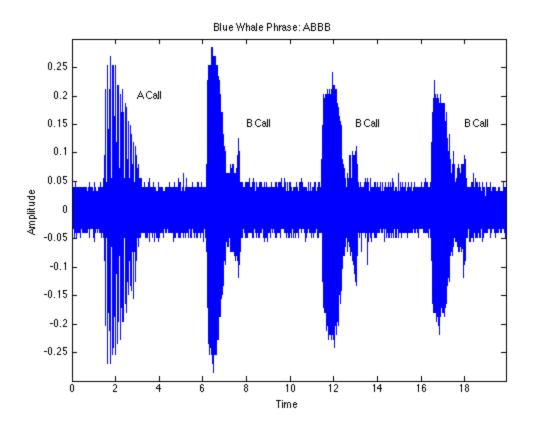
#### Read in the data and listen to it.

```
[y,fs] = auread('bluewhale.au');
sound(y,fs)
% Blue whale calls are so low that they are barely audible to humans.
% The time scale in the data has been compressed by a factor of 10 to
% raise the pitch and make the calls more clearly audible. The recording
% is of a characteristic blue whale phrase of four calls: ABBB.
```

Warning: AUREAD will be removed in a future release. Use AUDIOREAD instead

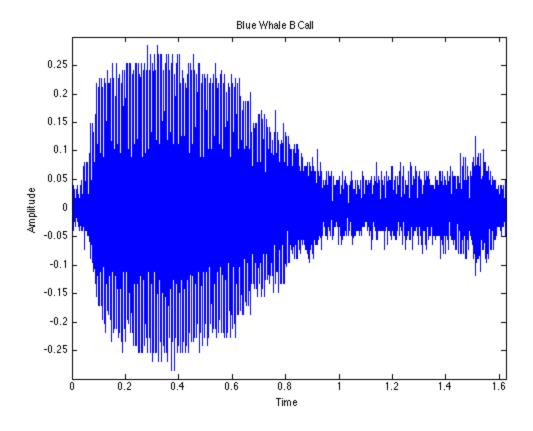
### Visualize the signal.

```
t = 0:1/fs:(length(y)-1)/fs; % Time base.
figure
plot(t,y)
axis([0 t(end) -0.3 0.3])
text(3,0.2,'A Call')
text(8,0.15,'B Call')
text(13,0.15,'B Call')
text(18,0.15,'B Call')
xlabel('Time')
ylabel('Amplitude')
title('{\bf Blue Whale Phrase: ABBB}')
```



## Index into the signal to better see the first B call.

```
BCall = y(2.45e4:3.10e4);
tB = 0:1/fs:(length(BCall)-1)/fs; % Time base.
figure
plot(tB,BCall)
axis([0 tB(end) -0.3 0.3])
xlabel('Time')
ylabel('Amplitude')
title('{\bf Blue Whale B Call}')
```



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