CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY

Name(s)
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Project Number
S1209

Project Title
Spectral-Temporal Analysis of Dog Barks

Abstract

Objectives/Goals
The objective of this experiment is to determine whether dogs bark differently in response to different stimuli.

Methods/Materials
Barks were recorded various times in response to three stimuli. These were in response to a stranger, when we were going outside, and when it wanted attention. These recordings were analyzed to view their spectra of frequencies and the amount of time between consecutive barks.

Results
The results show that barking towards strangers have more low frequencies, barking for attention have more mid-range frequencies, and the barking when going outside have more high range frequencies. Barking at a stranger had an average interval of .295 seconds, barking for attention had an average interval of .358 seconds, and barking when going out had an average interval of .412 seconds.

Conclusions/Discussion
My hypothesis was correct because dogs do have different barks according to their spectra and intervals.

Summary Statement
Evaluating spectrums and intervals of dog barks to see if they have different barks.

Help Received
Father introduced me to the computer software