
Subject: where function

Posted by [smuzz](#) on Sun, 23 Jan 2011 20:26:56 GMT

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Hi --

I am a beginner programmer trying to write a code involving the where function. My dataset includes call detections made by whales from 1 month. I am trying to search within this dataset for a particular call type, let's call it a moan. Then I want to search 1 hour before or after a detected moan and tally up all the other whale calls I hear -- this is the part I am stuck on. How do you use the where function to search 1 hour before or after? I am only familiar with using gt and lt.

This is what I have so far...

```
n=n_elements(auto) ; auto is my dataset with all whale calls
```

```
for i=0, n-1 do begin
```

```
  k = where(auto(*).manual_species eq 0 and auto(*).manual_call_type eq  
  1 and auto(*).time gt stime and auto(*).time lt etime,kcount) ; this  
  is looking for all moans within a specified start and end time of the  
  1 month study
```

```
  if(kcount gt 0) then begin
```

```
    j=where(auto(*).mdist lt 3.0 and auto(*).avg_amplitude ge 12.0 and  
    auto(*).time gt stime and auto(*).time lt etime and  
    auto(*).manual_species eq 7 and auto(*).manual_call_type eq  
    1,jcount) ; this is looking for all other whale calls within the  
    dataset
```

....right now j is tallying up all the calls in the dataset, but now I want to add in a part asking for only calls that occur 1 hour before or after a moan detection?

Any ideas?

Thanks, smuzz
