1 Creating Bursts

For analysing the data, there might be the need to create "sub-bursts" within your trajectory. For example, if the individuals were only recorded during the day, the monitoring took place over two consecutive years or the time lag between the relocations differs remarkably, looking at those different parts seperately might be necessary. The function `cutltraj` splits the given bursts of your `ltraj` object into smaller burst according to a specified criterion. In contrast, the function `bindltraj` combines the bursts of an object of class `ltraj` with the same attribute "id" to one unique burst. (c. Calenge) To find out if there are more missing values, you can plot the `ltraj` object. For that, you need to define the time interval you are looking at.

In our example, the locations of the cougars were recorded every 3 hours, starting at 3 AM. The location at midnight is always missing. We want to split the existing bursts (individuals) into "sub-bursts" where the time lag is smaller than 3 hours. Because we want to keep relocations which are only a few minutes wrong, we need a function which defines `dt` which is the time interval between successive relocations (in seconds).

```
foo = function(dt) {return(dt> (3800*3))}
```

Then we split the object of class `ltraj` according to that function into smaller bursts. The bursts we had before applying this function still remain.

```
xmpl.cut <- cutltraj(xmpl.ltr, "foo(dt)", nextr = TRUE)
```