R: Calculate time intervals

If I have a vector of dates and hours such as...

```
c("2016-03-15 13","2016-03-16 23","2016-03-17 06","2016-03-18 15","2016-03-19 08","2016-
03-20 21")
```

Can I find the number of hours that pass between each timestamp? I looked into `difftime` but it requires 2 vectors.

r

asked 1 hour ago

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2 Answers

You can do this by using `strptime()` function.

Try something like this.

```
data <- c("2016-03-15 13","2016-03-16 23","2016-03-17 06","2016-03-18 15","2016-03-19
08","2016-03-20 21")
datevec <- strptime(data,"%Y-%m-%d %H")
difftime(datevec[-length(datevec)],datevec[-1],units="hours")
```

Here is the output.

```
> difftime(datevec[-length(datevec)],datevec[-1],units="hours")
Time differences in hours
[1] -34  -7 -33 -17 -37
```

answered 9 mins ago

Vijay_Shinde
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We can do this after converting to 'DateTime' class using `lubridate` , then get the difference in 'hour' between adjacent elements using `difftime` by passing two `vector` s after removing the last and first observation in the `vector`

```
library(lubridate)
v2 <- ymd_h(v1)
```

Or a `base R` option is `as.POSIXct`

```
v2 <- as.POSIXct(v1, format = "%Y-%m-%d %H")
```

and then do the `difftime`

```
difftime(v2[-length(v2)], v2[-1], unit = "hour")
```

data

```
v1 <- c("2016-03-15 13","2016-03-16 23","2016-03-17 06",
             "2016-03-18 15","2016-03-19 08","2016-03-20 21")
```

edited 1 hour ago

answered 1 hour ago

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