Scopoli's shearwaters movements

Pierre Cottais & An Hoàng

15/12/2021

Contents

1 Data exploration						
	1.1 Generalisation data set	1				
	1.9 Training data set	3				

1 Data exploration

1.1 Generalisation data set

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: mer., déc. 15, 2021 - 17:00:46

Table 1:	Extrait du jeu de données du 28 juin	ı 2011*

	Longitude	Latitude	Cell	Date	Day	year	month
2011-06-28.1	2.034	44.475	1	2011-06-28	2011-06-28	2011	06
2011-06-28.2	2.101	44.475	2	2011-06-28	2011-06-28	2011	06
2011-06-28.3	2.169	44.475	3	2011-06-28	2011-06-28	2011	06
2011-06-28.4	2.236	44.475	4	2011-06-28	2011-06-28	2011	06
2011-06-28.5	2.304	44.475	5	2011-06-28	2011-06-28	2011	06
2011-06-28.14666	12.699	40.025	14,666	2011-06-28	2011-06-28	2011	06
2011-06-28.14667	12.766	40.025	14,667	2011-06-28	2011-06-28	2011	06
2011-06-28.14668	12.834	40.025	14,668	2011-06-28	2011-06-28	2011	06
2011-06-28.14669	12.901	40.025	14,669	2011-06-28	2011-06-28	2011	06
2011-06-28.14670	12.969	40.025	14,670	2011-06-28	2011-06-28	2011	06

^{*}Six premières colonnes sur les 41 colonnes du jeu de données

1.1.1 Data visualisation

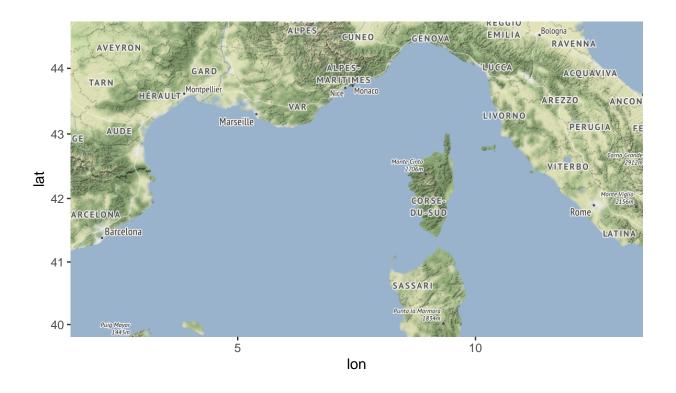
```
bbox <- make_bbox(lat = Latitude, lon = Longitude, data = df.day1)
map.day1 <- get_map(location = bbox, source = "stamen", maptype = "watercolor")</pre>
```

Source : http://tile.stamen.com/terrain/7/64/46.png

```
## Source : http://tile.stamen.com/terrain/7/65/46.png
## Source : http://tile.stamen.com/terrain/7/66/46.png
## Source : http://tile.stamen.com/terrain/7/67/46.png
## Source : http://tile.stamen.com/terrain/7/68/46.png
## Source : http://tile.stamen.com/terrain/7/68/47.png
## Source : http://tile.stamen.com/terrain/7/65/47.png
## Source : http://tile.stamen.com/terrain/7/66/47.png
## Source : http://tile.stamen.com/terrain/7/67/47.png
## Source : http://tile.stamen.com/terrain/7/68/47.png
## Source : http://tile.stamen.com/terrain/7/68/48.png
## Source : http://tile.stamen.com/terrain/7/66/48.png
## Source : http://tile.stamen.com/terrain/7/66/48.png
## Source : http://tile.stamen.com/terrain/7/67/48.png
## Source : http://tile.stamen.com/terrain/7/67/48.png
```

map.day1 %>% ggmap()

2



1.2 Training data set

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: mer., déc. 15, 2021 - 17:00:49

Table 2: Extrait du jeu de données*

	Site	trip_ID	Time	ID	Longitude	Latitude	Bathy
2011-08-02.129998	Riou	$ID2R_1$	2011-08-02 00:20:56	ID2R	5.330	43.166	95.950
2011-08-02.129999	Riou	$ID2R_1$	2011-08-02 00:22:56	ID2R	5.327	43.168	95.950
2011-08-02.130000	Riou	$ID2R_1$	2011-08-02 00:24:56	ID2R	5.326	43.168	95.950
2011-08-02.130001	Riou	$ID2R_1$	2011-08-02 00:26:56	ID2R	5.325	43.169	102.450
2011-08-02.130002	Riou	$ID2R_1$	2011-08-02 00:28:56	ID2R	5.325	43.169	102.450
2011-09-03.90287	Lavezzi	$ID21L_1$	2011-09-03 03:42:22	ID21L	8.751	41.008	58
2011-09-03.90288	Lavezzi	$ID21L_1$	2011-09-03 03:45:22	ID21L	8.752	41.008	58
2011-09-03.90289	Lavezzi	$ID21L_1$	2011-09-03 03:48:22	ID21L	8.752	41.008	58
2011-09-03.90290	Lavezzi	$ID21L_1$	2011-09-03 03:51:22	ID21L	8.752	41.008	58
2011-09-03.90291	Lavezzi	$ID21L_1$	2011-09-03 03:54:22	ID21L	8.752	41.008	58

^{*}Dix premières colonnes sur les 25 colonnes du jeu de données