Dolphin_Results

Goals of this study

Investigate patterns in the acoustic behavior of dolphins

Data

Acoustic data was collected from drifting acoustic recorders during the 2018 California Current Ecosystem survey. See Simonis et al 2020 for more details. Data analyzed here includes CCES Drifts 10, 12, 13, 14, 16.

Combine Logs

The presence of Dolphins and ships were logged by 1 Seatech analyst: Keisha Askoak.

Remove times with missing data

MEHS did not have audio data for the entire length of all drifts. Only show drift tracks and events from times where data was available

Plots

Diel Plot

```
#Define Figure Options

figtitle<-c('Drift-10','Drift-12','Drift-13','Drift-14','Drift-16')
UOColor = 'blue'
GgColor = 'magenta'
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UO

```
[[1]]
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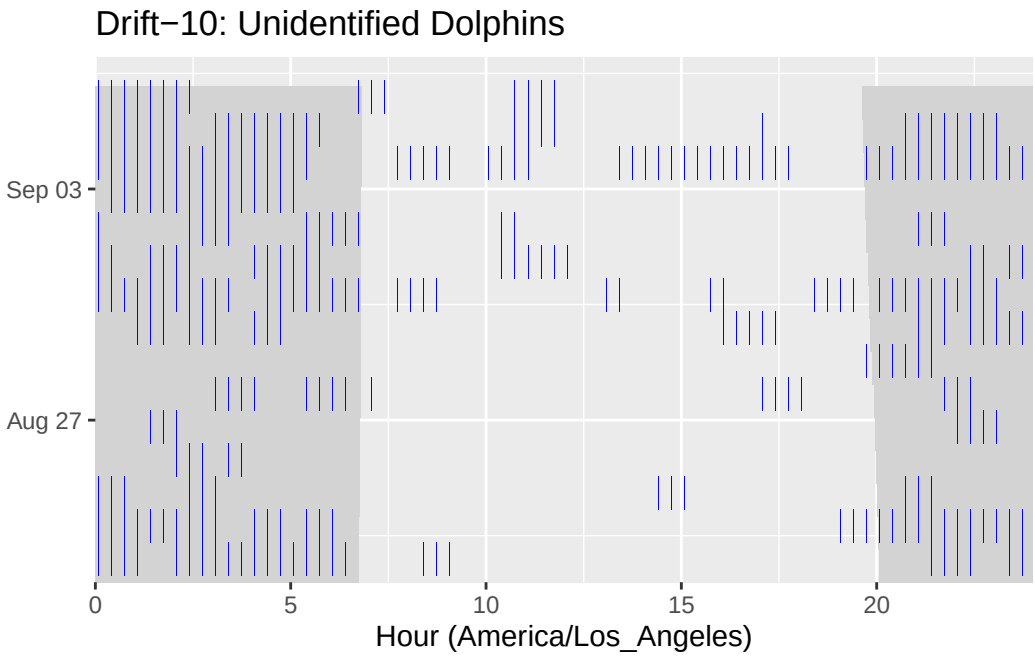
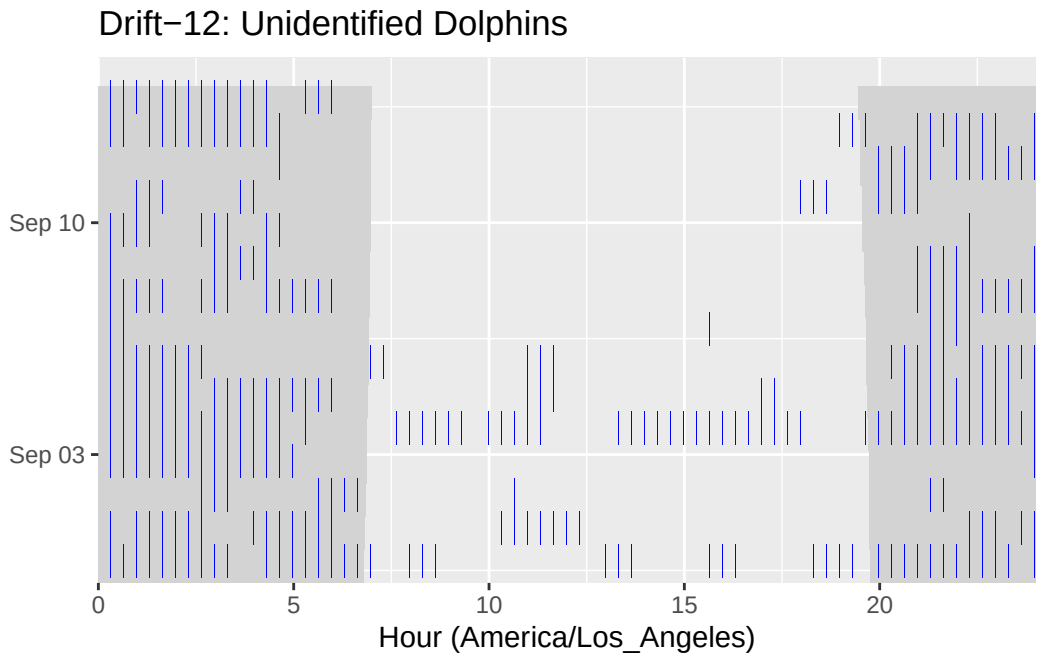
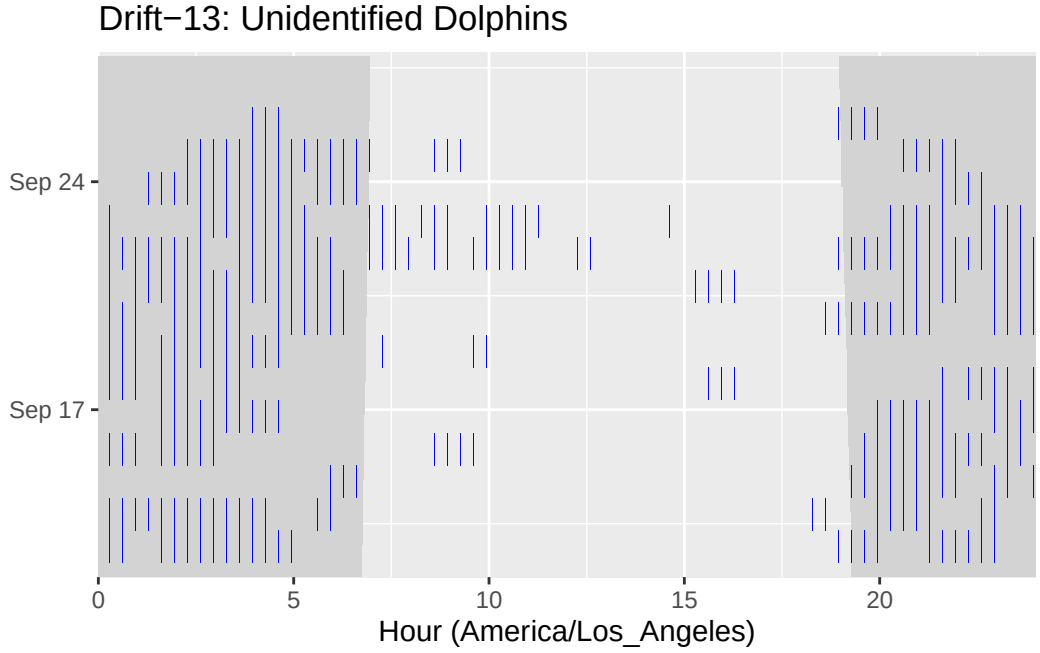

Drift−10: Unidentified Dolphins
Sep 03
Aug 27
0
5
10
15
20
Hour (America/Los_Angeles)

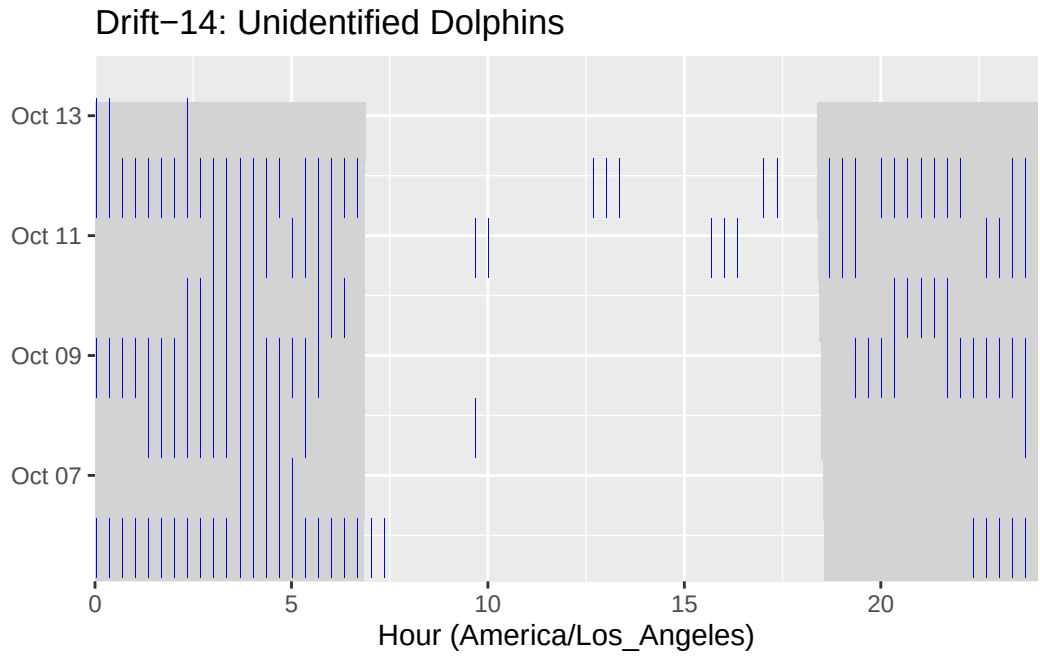
```
[[2]]
```


Drift−12: Unidentified Dolphins
Sep 10
Sep 03
0
5
10
15
20
Hour (America/Los_Angeles)

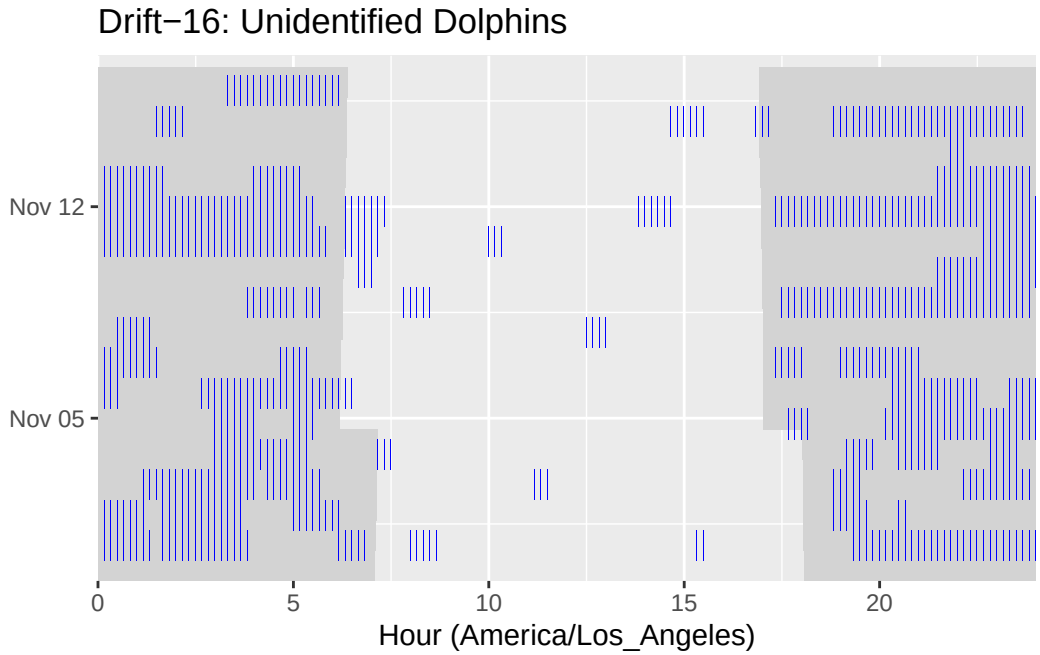
```
[[3]]
```


Drift−13: Unidentified Dolphins
Sep 24
Sep 17
0
5
10
15
20
Hour (America/Los_Angeles)

```
[[4]]
```

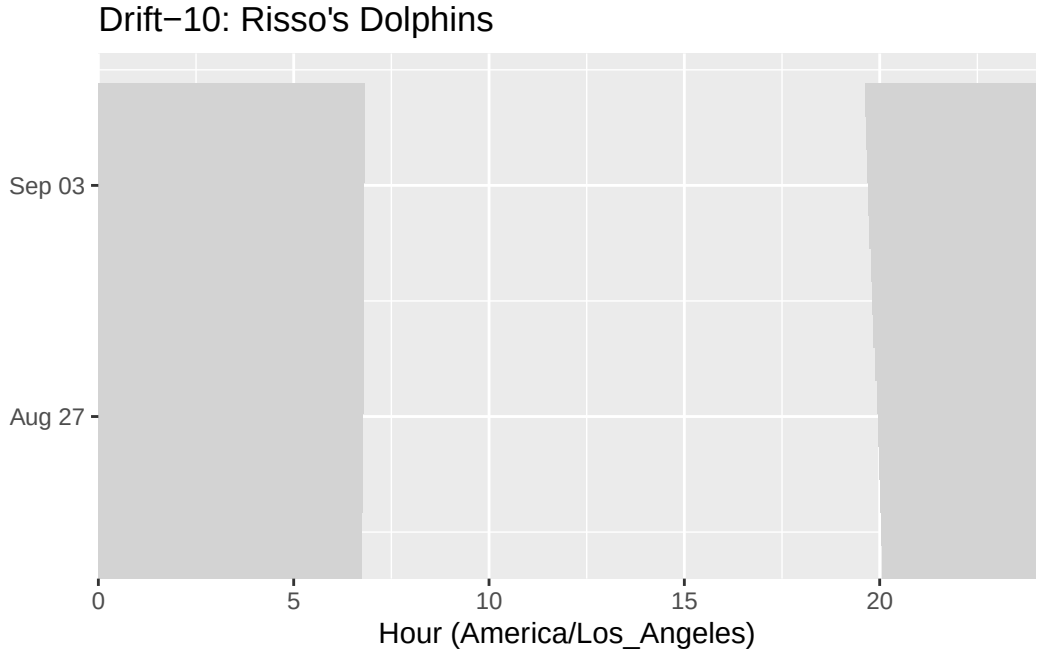

Drift−14: Unidentified Dolphins
Oct 13
Oct 11
Oct 09
Oct 07
0
5
10
15
20
Hour (America/Los_Angeles)

```
[[5]]
```

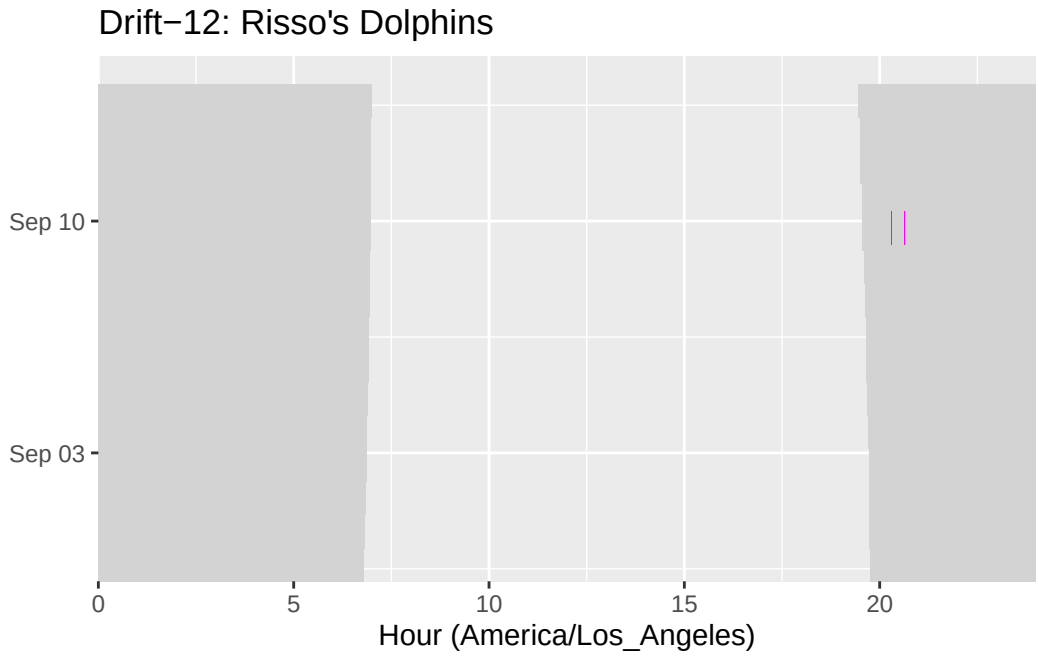

Drift−16: Unidentified Dolphins
Nov 12
Nov 05
0
5
10
15
20
Hour (America/Los_Angeles)

Risso's

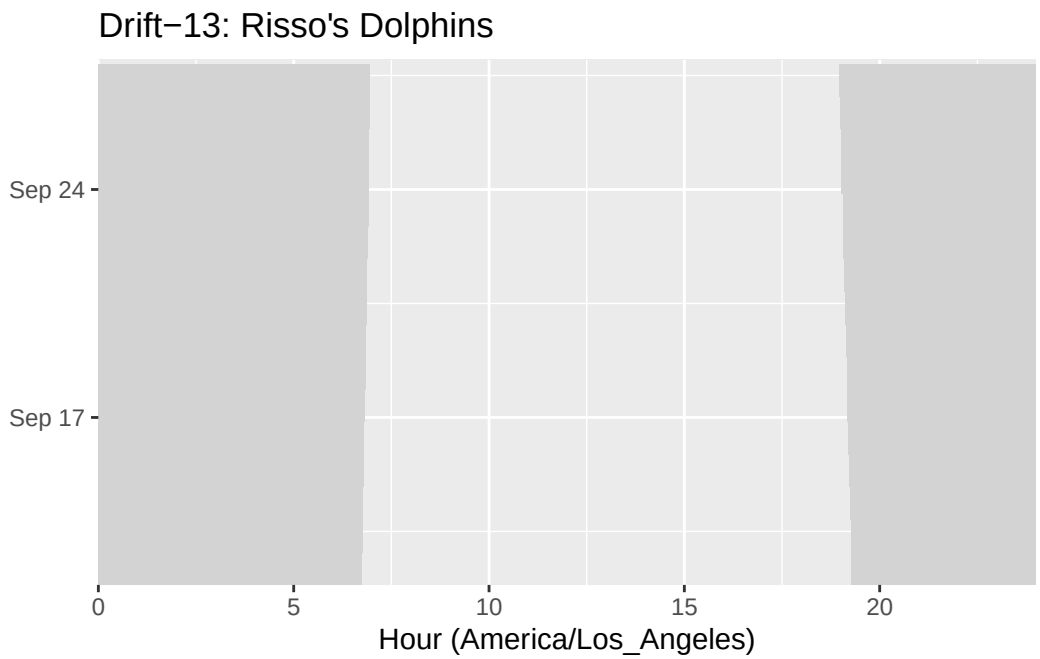
```
[[1]]
```


Drift−10: Risso's Dolphins
Sep 03
Aug 27
0
5
10
15
20
Hour (America/Los_Angeles)

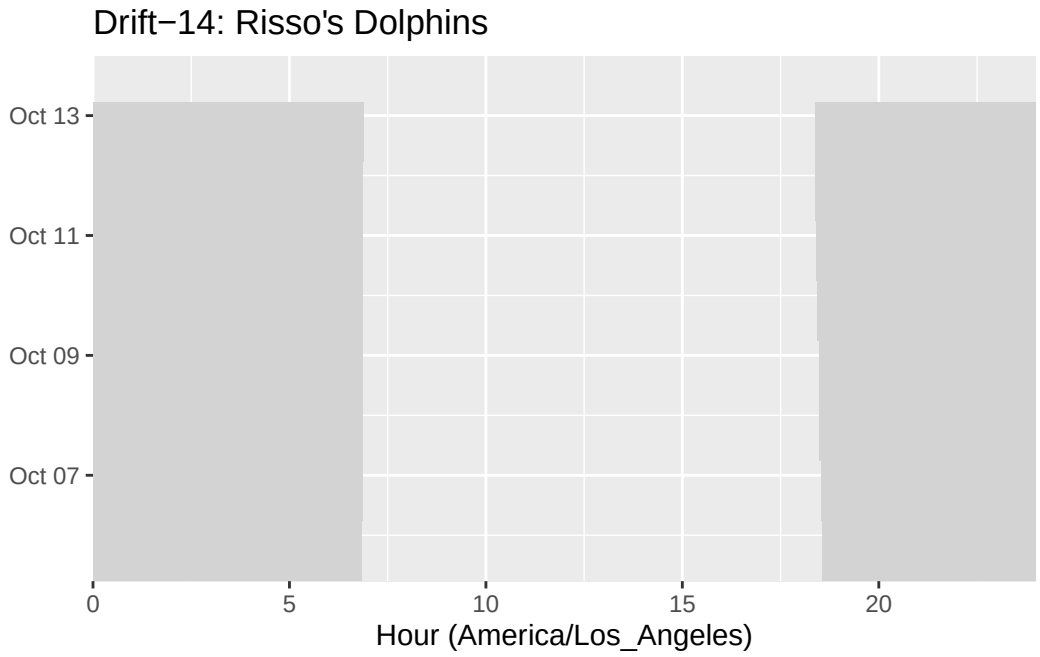
```
[[2]]
```


Drift−12: Risso's Dolphins
Sep 10
Sep 03
0
5
10
15
20
Hour (America/Los_Angeles)

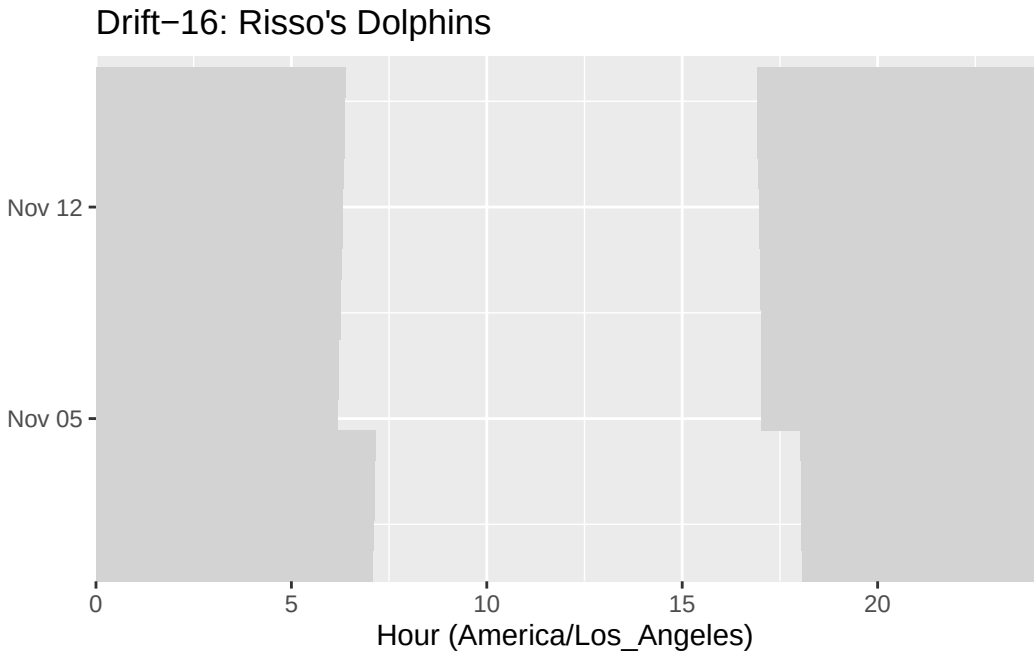
```
[[3]]
```


Drift−13: Risso's Dolphins
Sep 24
Sep 17
0
5
10
15
20
Hour (America/Los_Angeles)

```
[[4]]
```

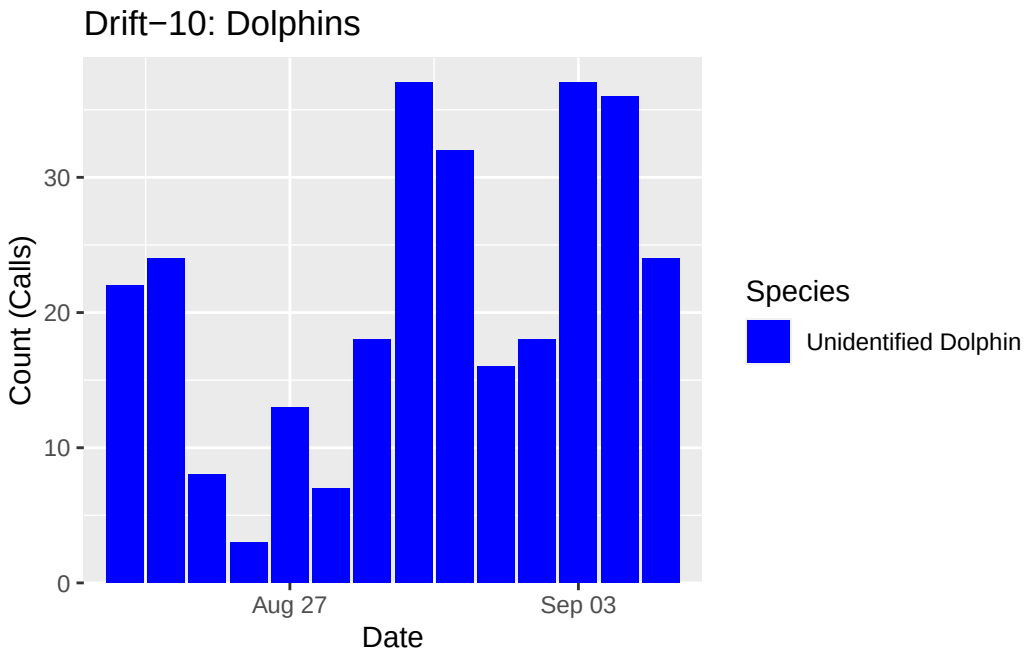

Drift−14: Risso's Dolphins
Oct 13
Oct 11
Oct 09
Oct 07
0
5
10
15
20
Hour (America/Los_Angeles)

```
[[5]]
```

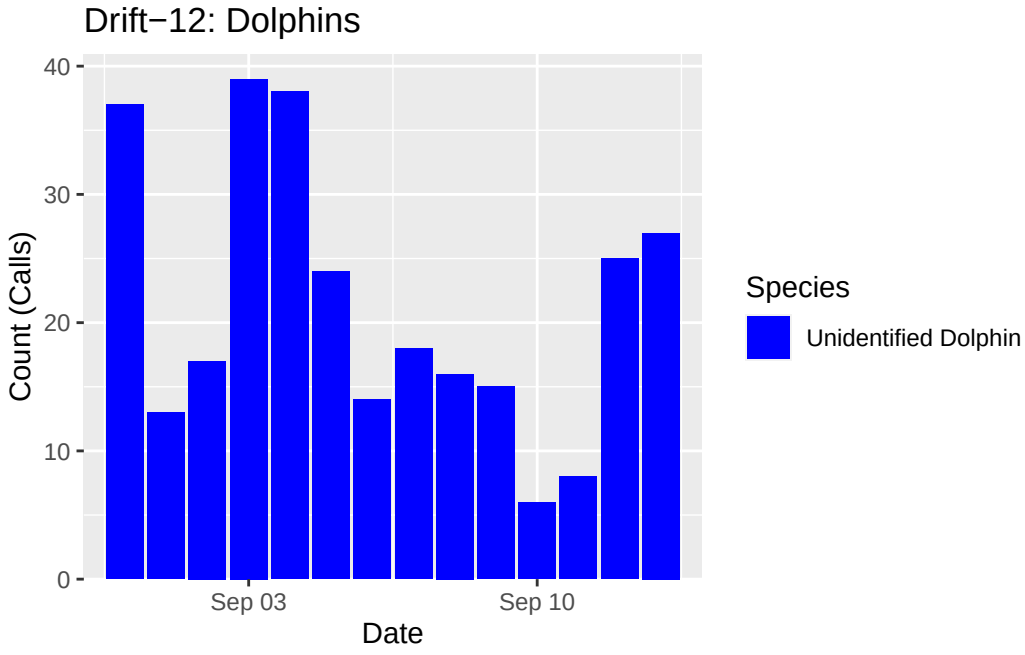


Weekly Plot

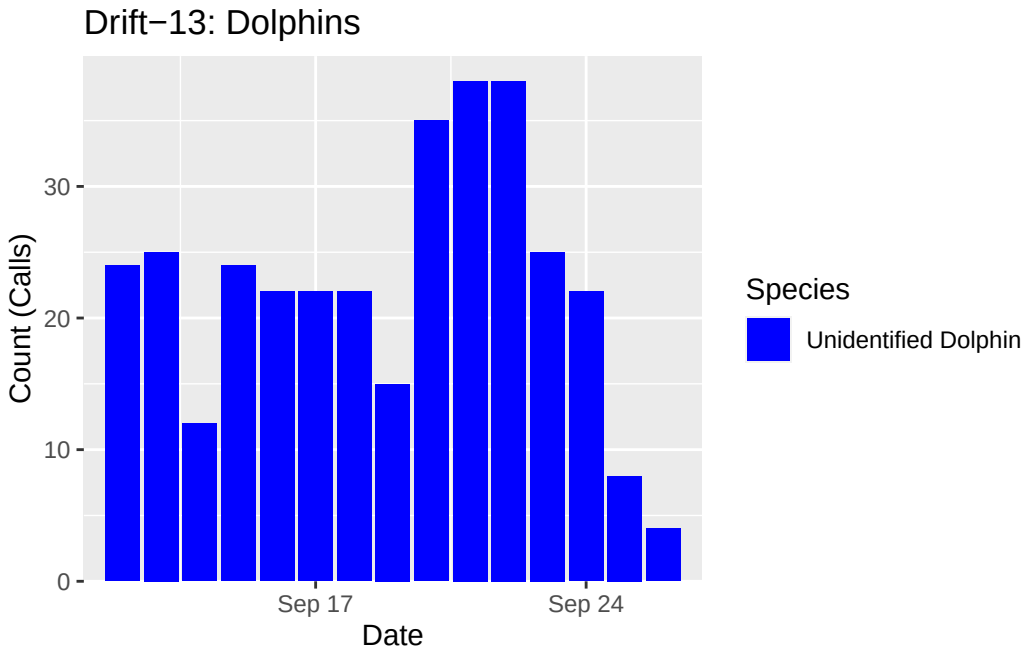
```
[[1]]
```


Drift−10: Dolphins
Count (Calls)
30
20
10
0
Aug 27
Sep 03
Date
Species
Unidentified Dolphin

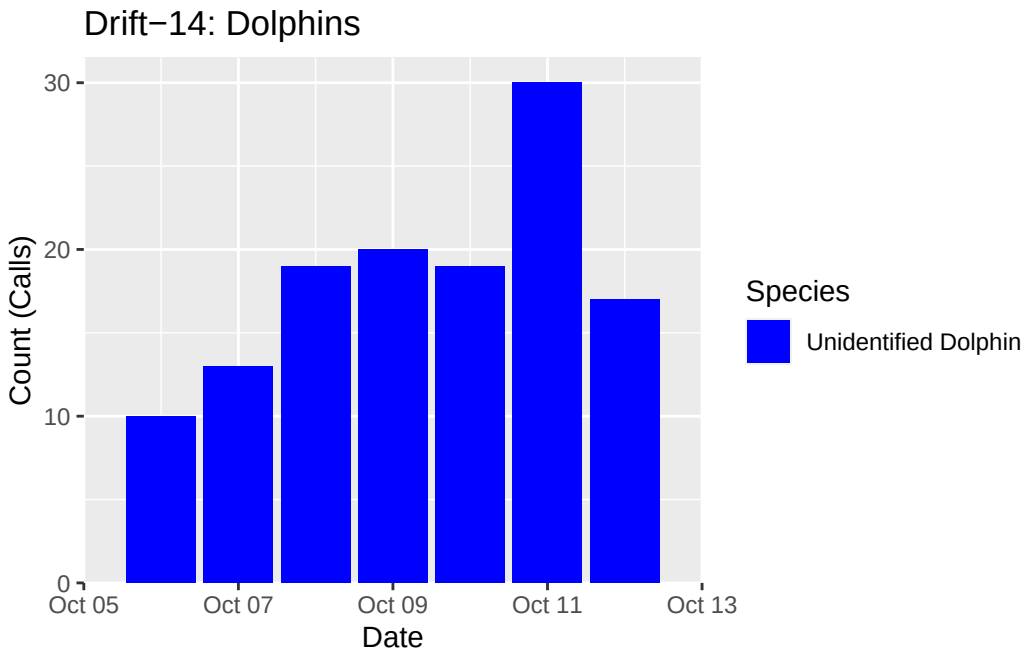
```
[[2]]
```


Drift−12: Dolphins
Count (Calls)
40
30
20
10
0
Sep 03
Sep 10
Date
Species
Unidentified Dolphin

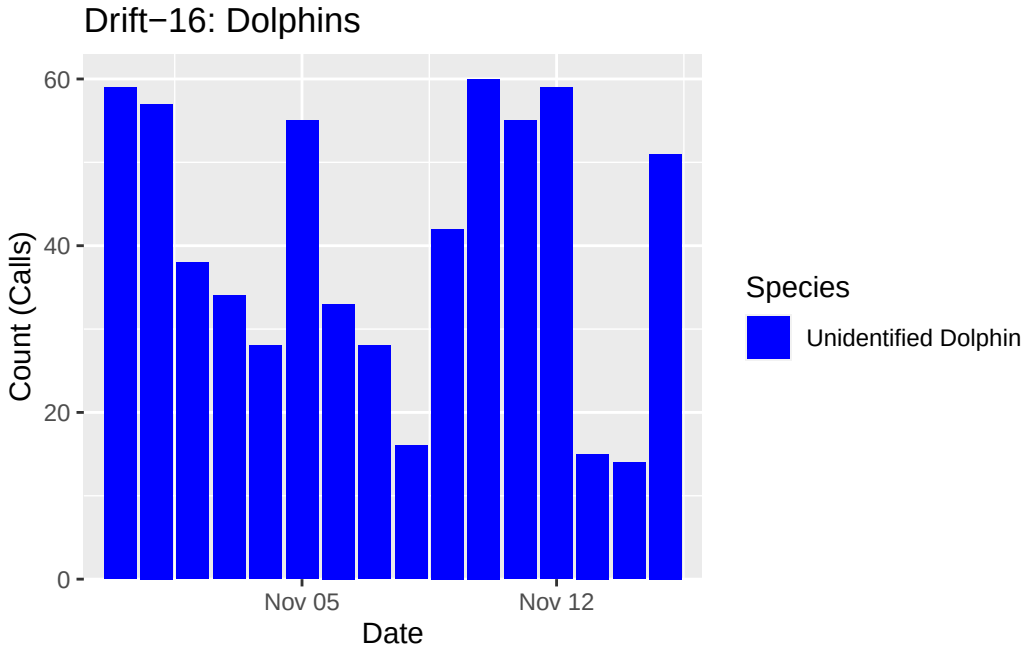
```
[[3]]
```


Drift−13: Dolphins
Count (Calls)
30
20
10
0
Sep 17
Sep 24
Date
Species
Unidentified Dolphin

```
[[4]]
```


Drift−14: Dolphins
30
20
10
0
Count (Calls)
Oct 05
Oct 07
Oct 09
Oct 11
Oct 13
Date
Species
Unidentified Dolphin

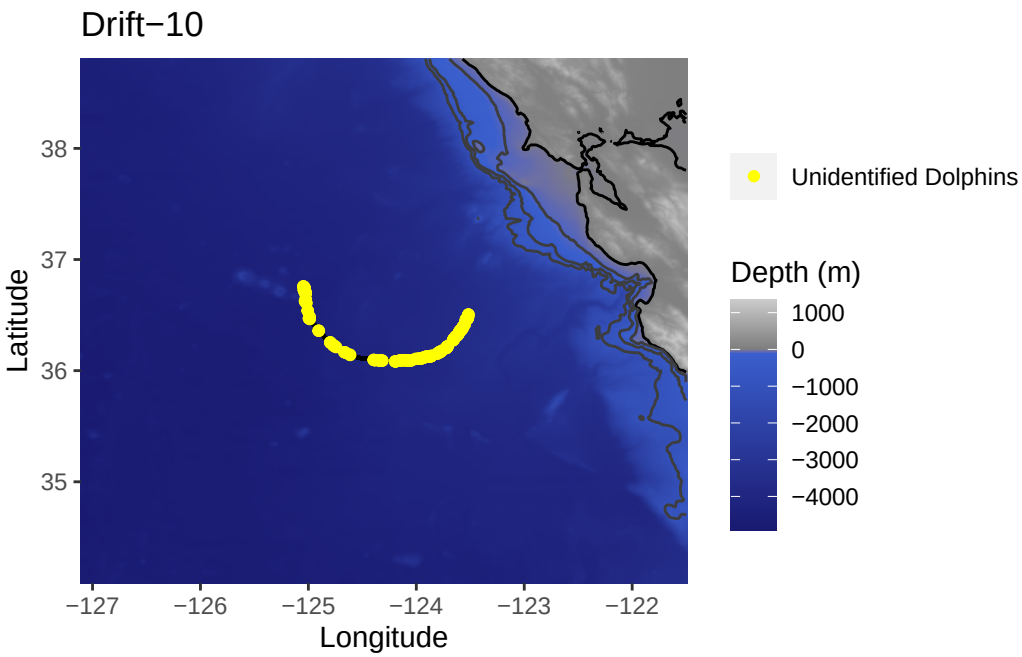
```
[[5]]
```


Drift−16: Dolphins
60
40
20
0
Count (Calls)
Nov 05
Nov 12
Date
Species
Unidentified Dolphin

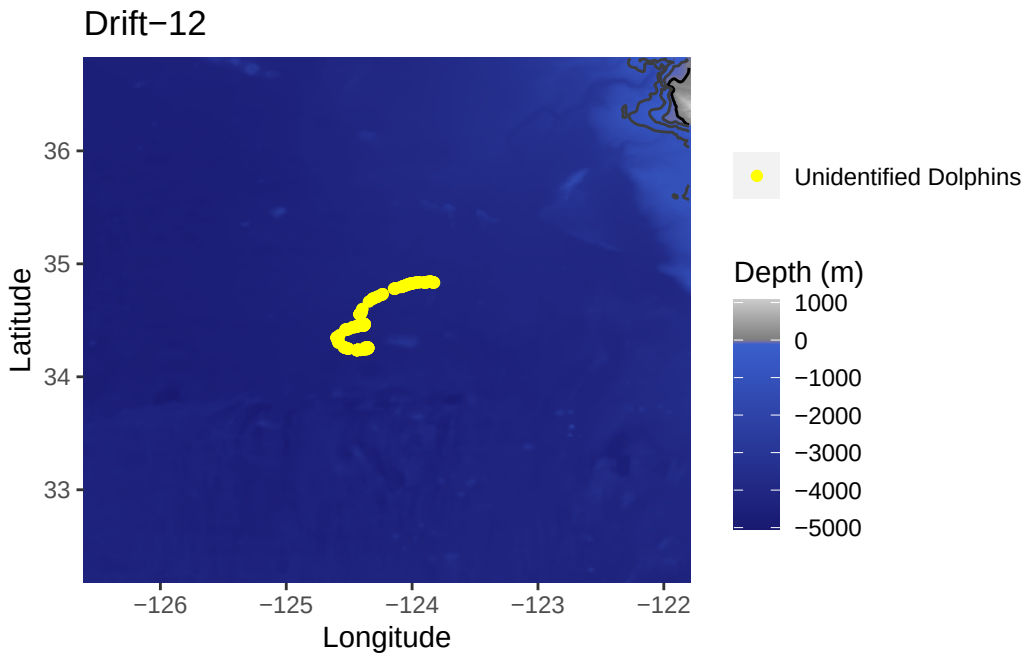
Map

UO

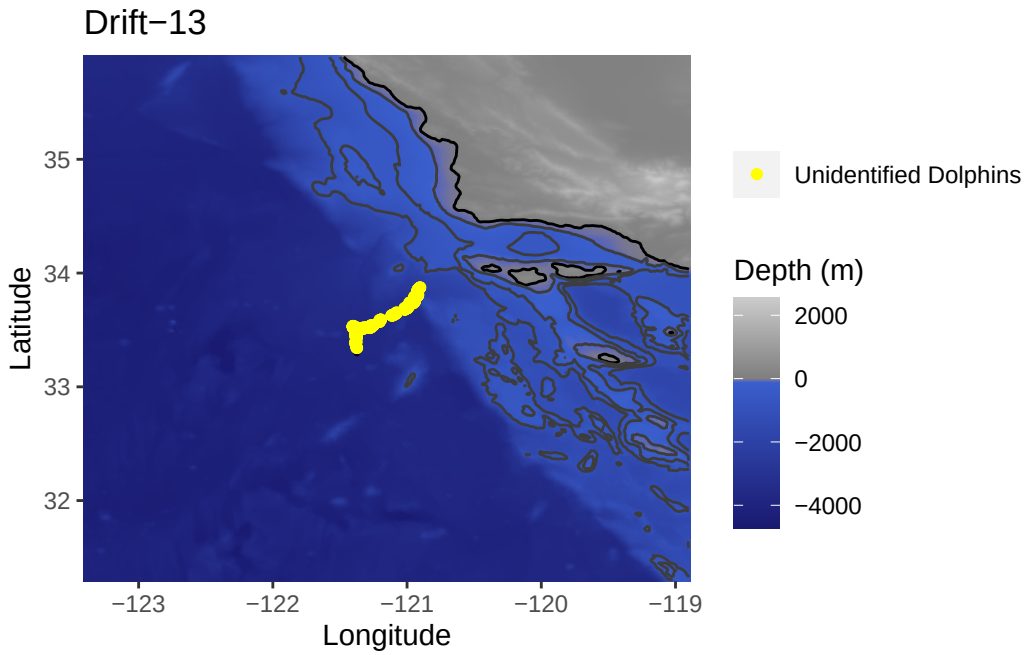
```
[[1]]
```


Drift−10
38
37
36
35
Latitude
−127
−126
−125
−124
−123
−122
Longitude
Unidentified Dolphins
Depth (m)
1000
0
−1000
−2000
−3000
−4000

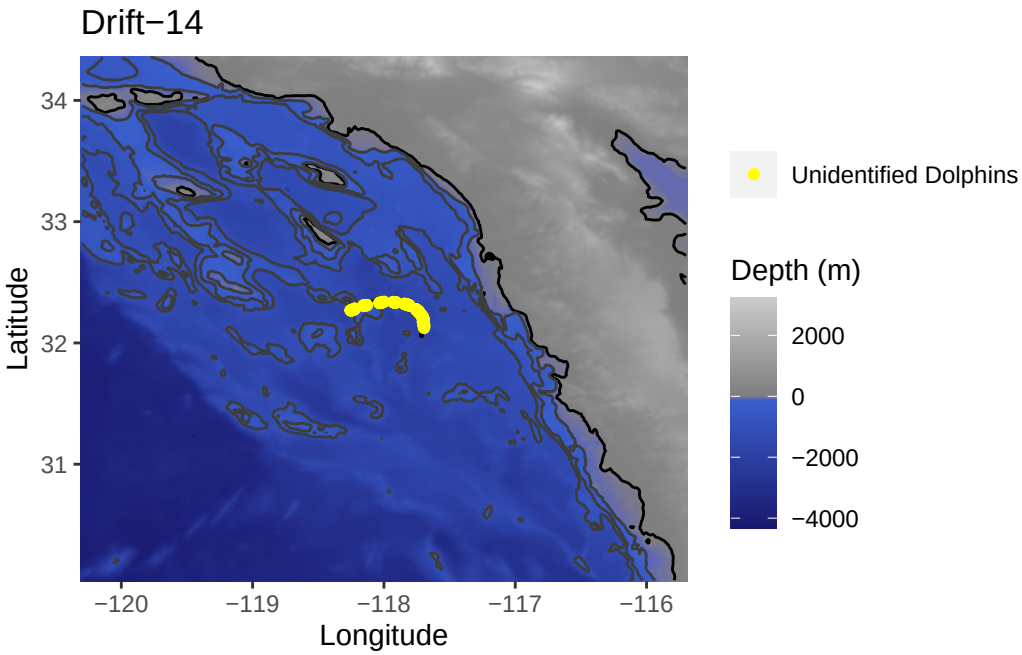
```
[[2]]
```


Drift−12
36
35
34
33
Latitude
−126
−125
−124
−123
−122
Longitude
Unidentified Dolphins
Depth (m)
1000
0
−1000
−2000
−3000
−4000
−5000

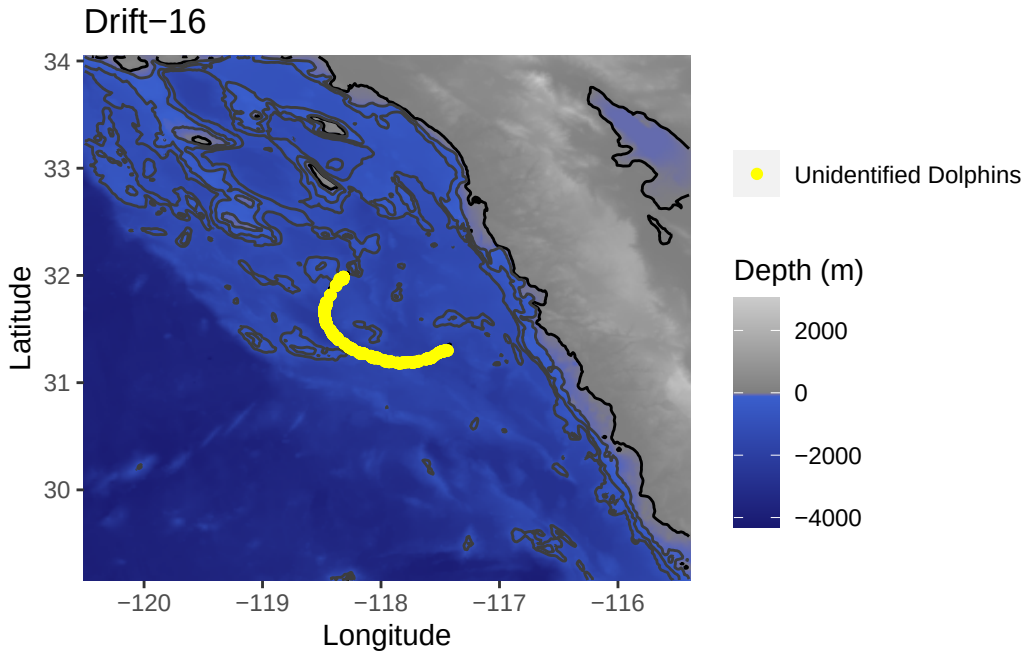
[[3]]


Drift−13
35
34
33
32
Latitude
−123
−122
−121
−120
−119
Longitude
Unidentified Dolphins
Depth (m)
2000
0
−2000
−4000

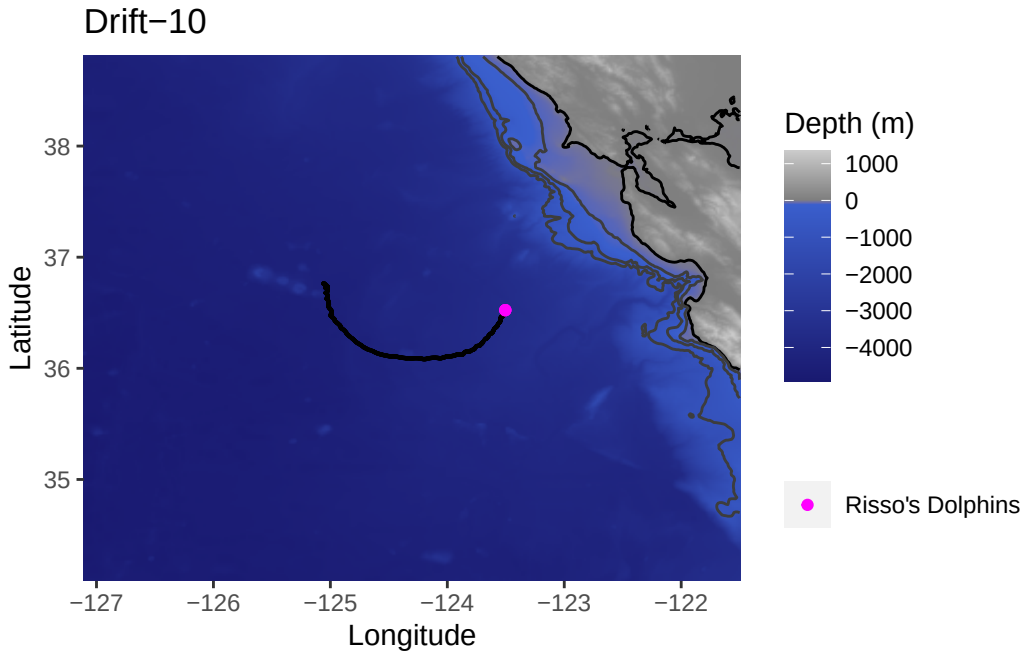
[[4]]


Drift−14
34
33
32
31
Latitude
−120
−119
−118
−117
−116
Longitude
Unidentified Dolphins
Depth (m)
2000
0
−2000
−4000

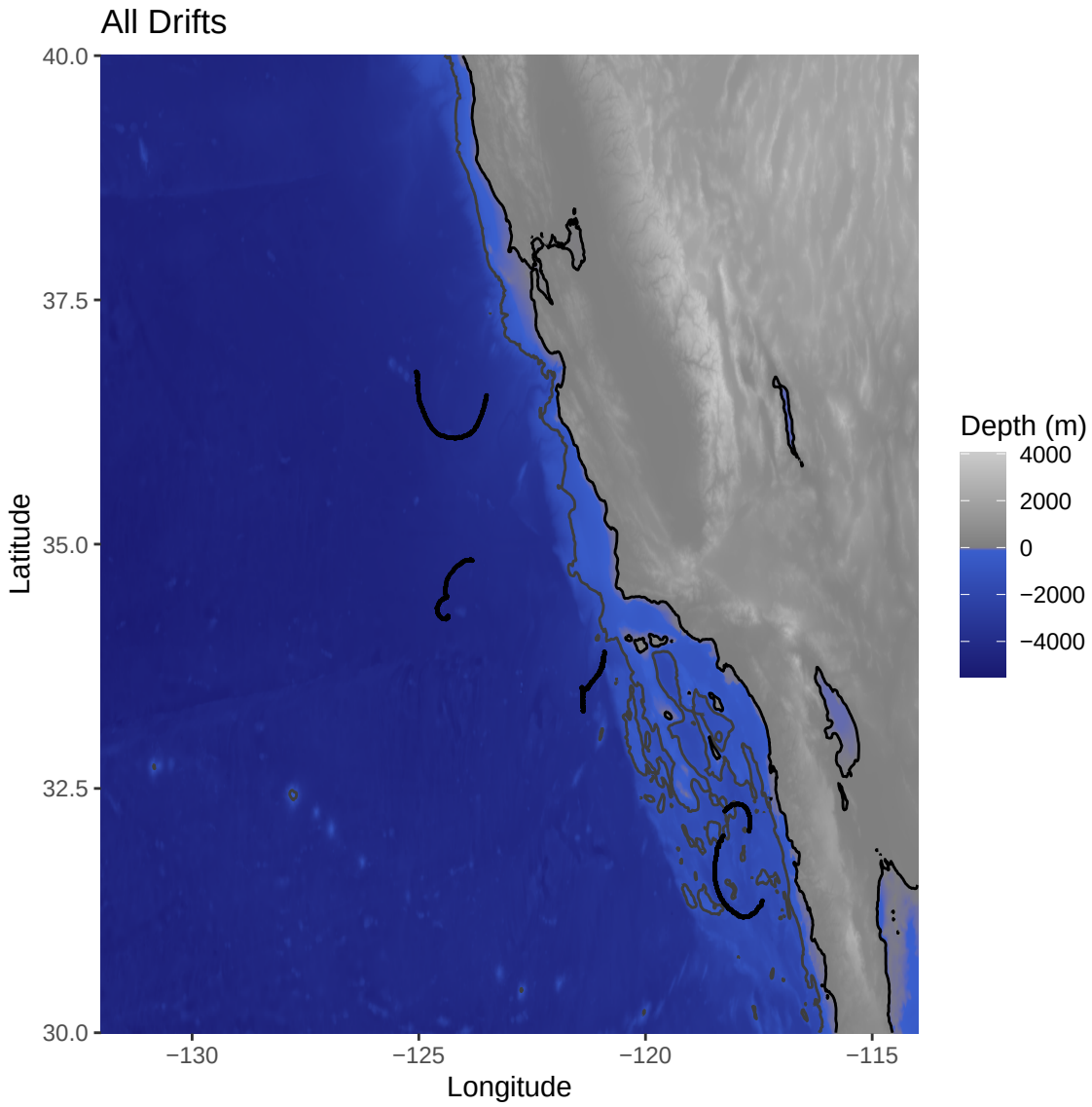
[[5]]

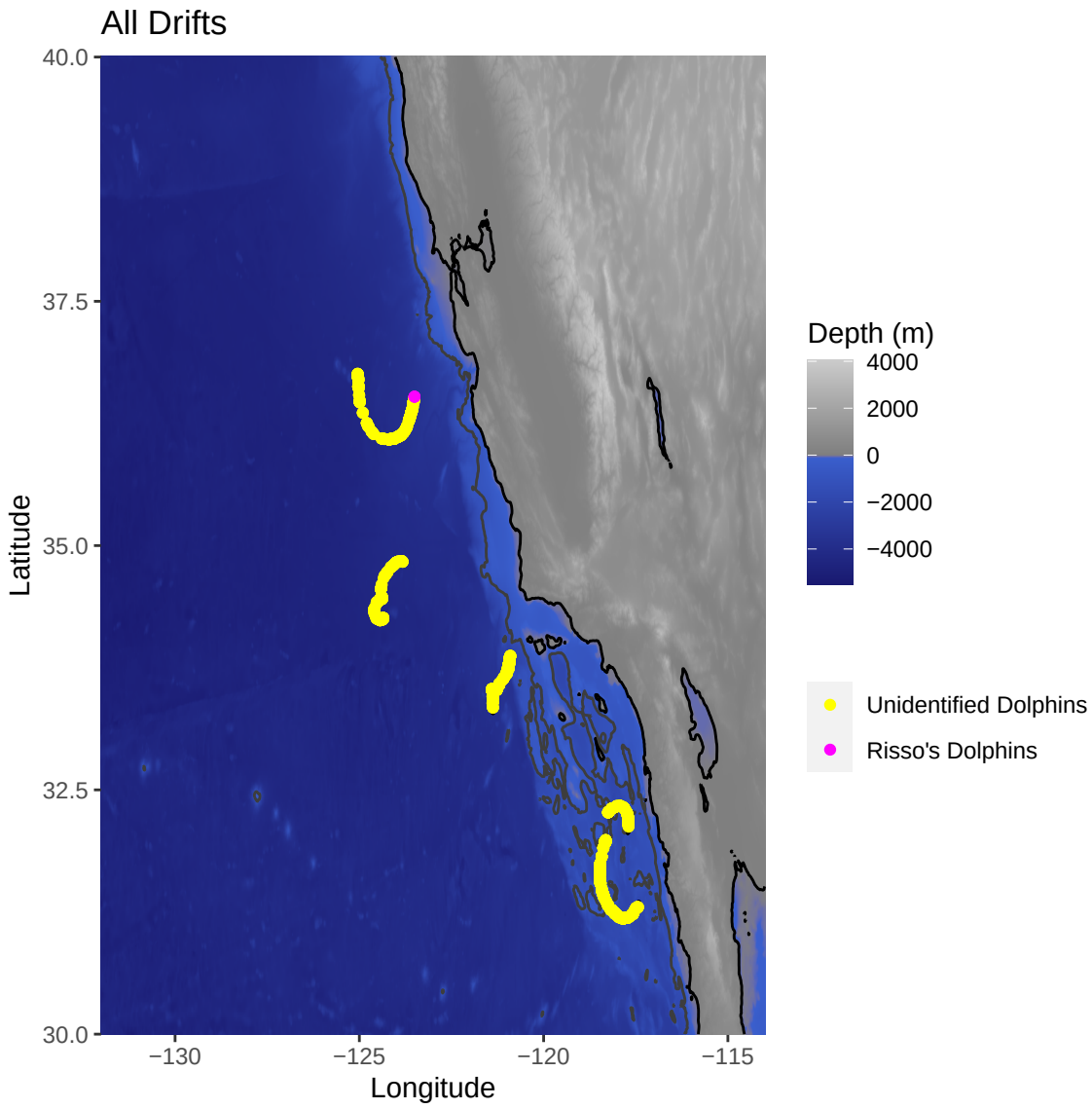

Drift−16
34
33
32
31
30
Latitude
−120
−119
−118
−117
−116
Longitude
Unidentified Dolphins
Depth (m)
2000
0
−2000
−4000

Risso's

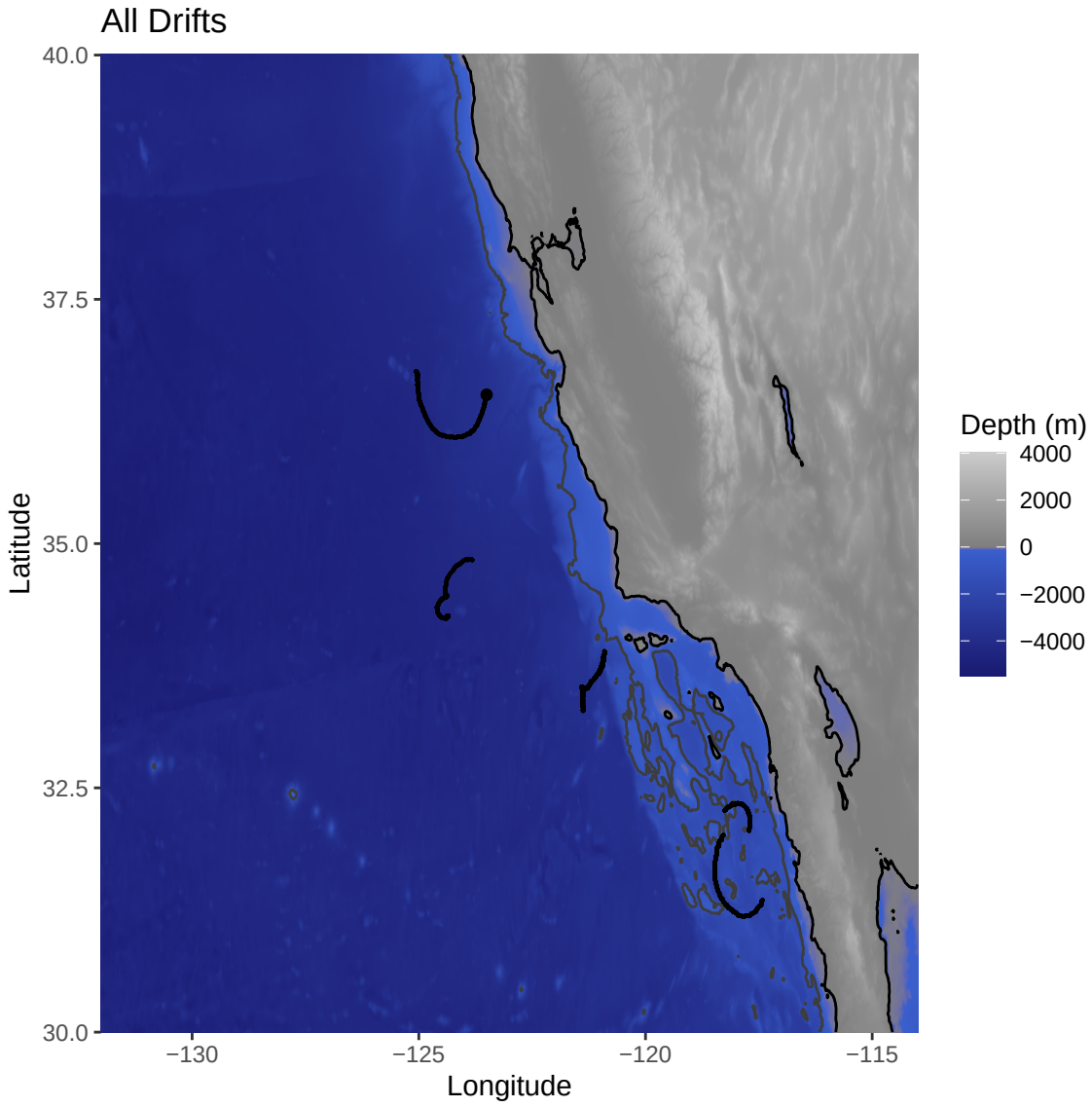

Drift−10
38
37
36
35
Latitude
−127
−126
−125
−124
−123
−122
Longitude
Depth (m)
1000
0
−1000
−2000
−3000
−4000
Risso's Dolphins

Map of all drifts

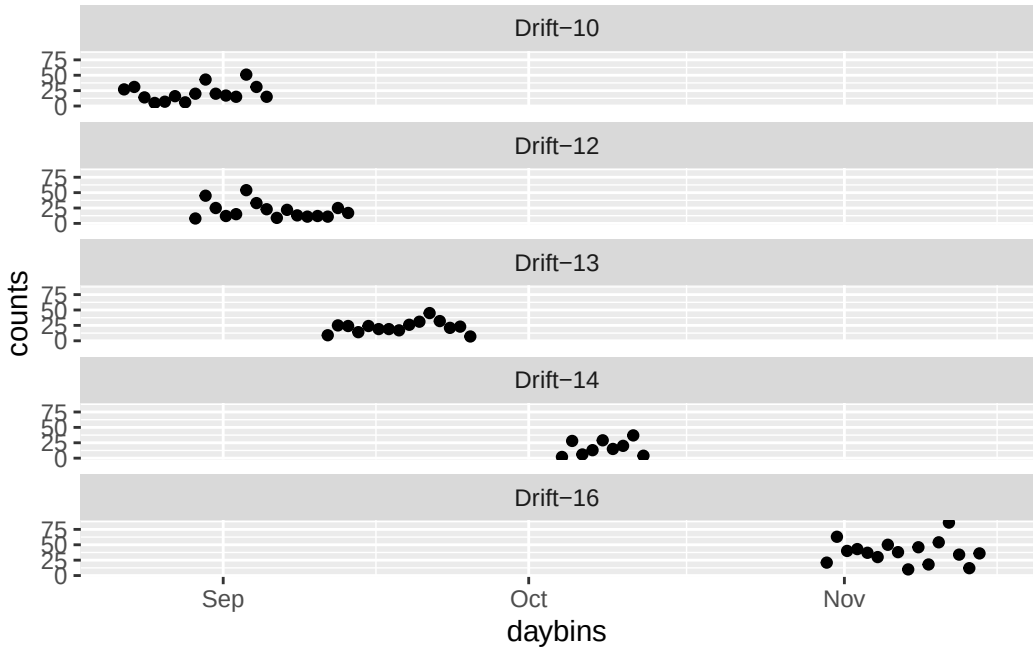



All Drifts
40.0
37.5
35.0
32.5
30.0
Latitude
−130
−125
−120
−115
Longitude
Depth (m)
4000
2000
0
−2000
−4000
Unidentified Dolphins
Risso's Dolphins

Risso's



Drift Timeseries


Drift−10
Drift−12
Drift−13
Drift−14
Drift−16
75
50
25
0
counts
Sep
Oct
Nov
daybins