

# Análisis de la posición y distancia recorrida de los huracanes

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## Análisis de la distancia (II)

### Mínimos y máximos de distancia recorrida y duración

#### Distancias

```
# Summary of the distances
storms.joint %>%
  group_by(basin, sst.class) %>%
  summarise(dist.mean = round(mean(distance)/1000))

## # A tibble: 4 x 3
## # Groups:   basin [?]
##   basin sst.class dist.mean
##   <chr> <chr>         <dbl>
## 1 EPAC  high           2754.
## 2 EPAC  low            2221.
## 3 NATL  high           3767.
## 4 NATL  low            3228.
```

#### Duraciones

```
# Summary of the durations
storms.joint %>%
  group_by(basin, sst.class) %>%
  summarise(dist.mean = round(mean(storm.duration)))

## # A tibble: 4 x 3
## # Groups:   basin [?]
##   basin sst.class dist.mean
##   <chr> <chr>         <dbl>
## 1 EPAC  high           172.
## 2 EPAC  low            144.
## 3 NATL  high           176.
## 4 NATL  low            150.
```

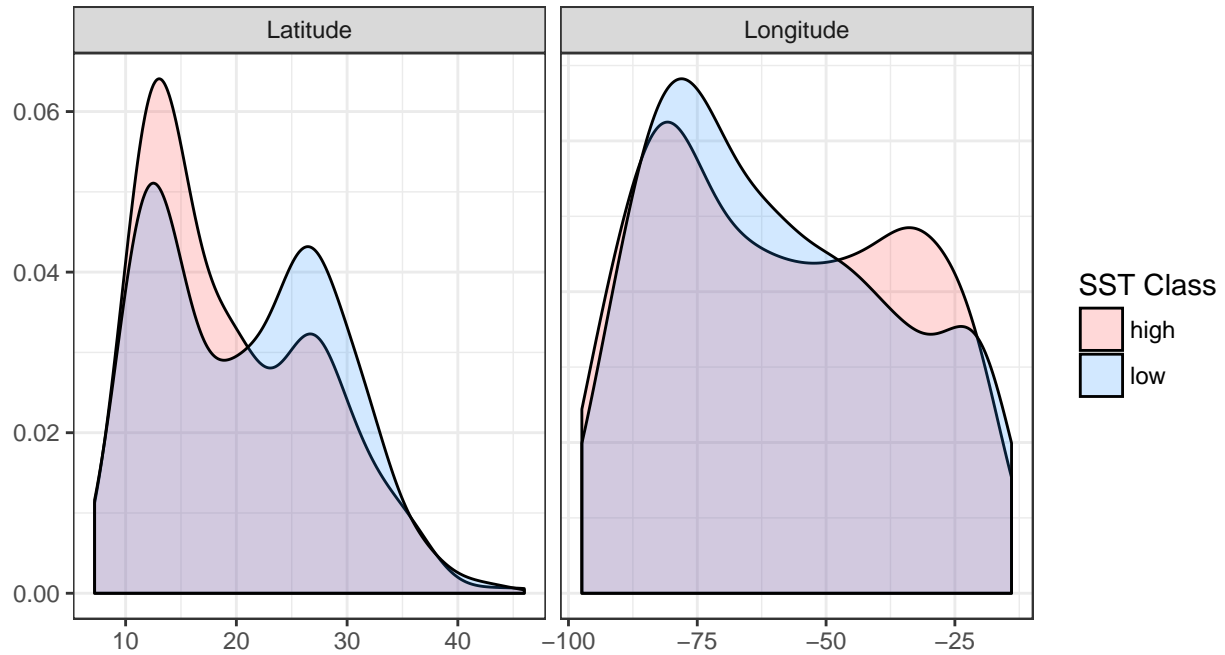
## Análisis de posición inicial y final (II)

En los gráficos (no he puesto el continente de fondo) tenemos básicamente un scatterplot de la posición inicial y final (separado por años calientes y fríos), además he hecho que la transparencia de los puntos así como el tamaño dependan de la distancia recorrida por los huracanes.

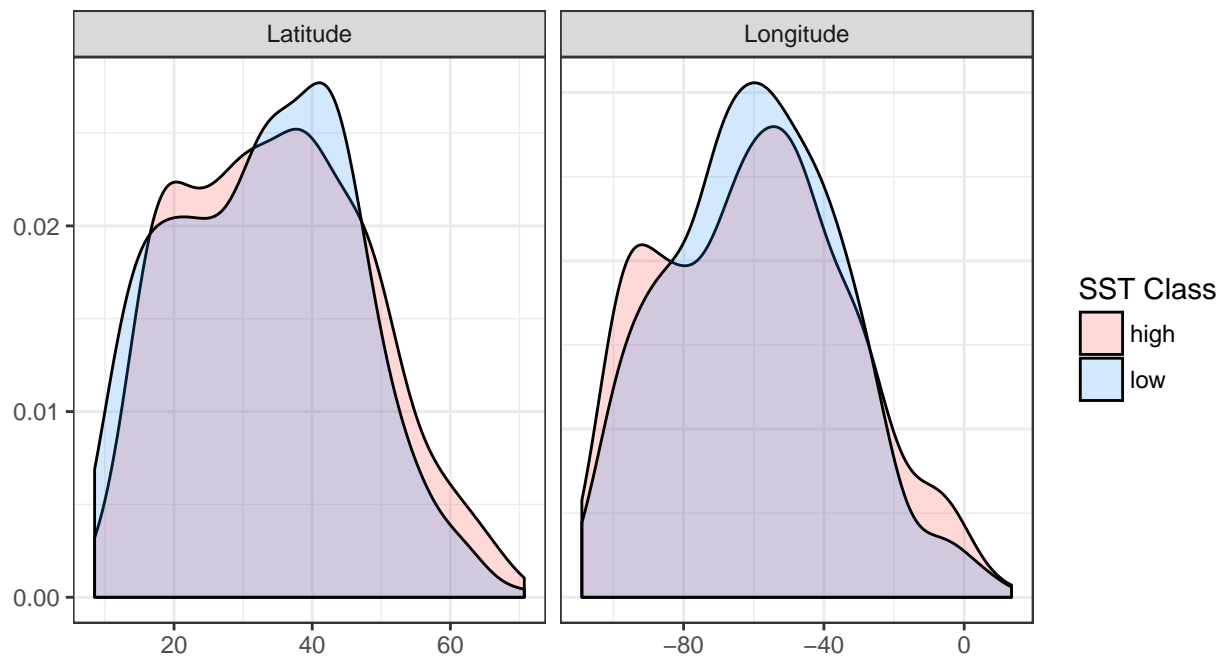
## North Atlantic

Todas las tormentas (NATL)

```
plot_positions_histogram("NATL", "first") + theme_bw()
```

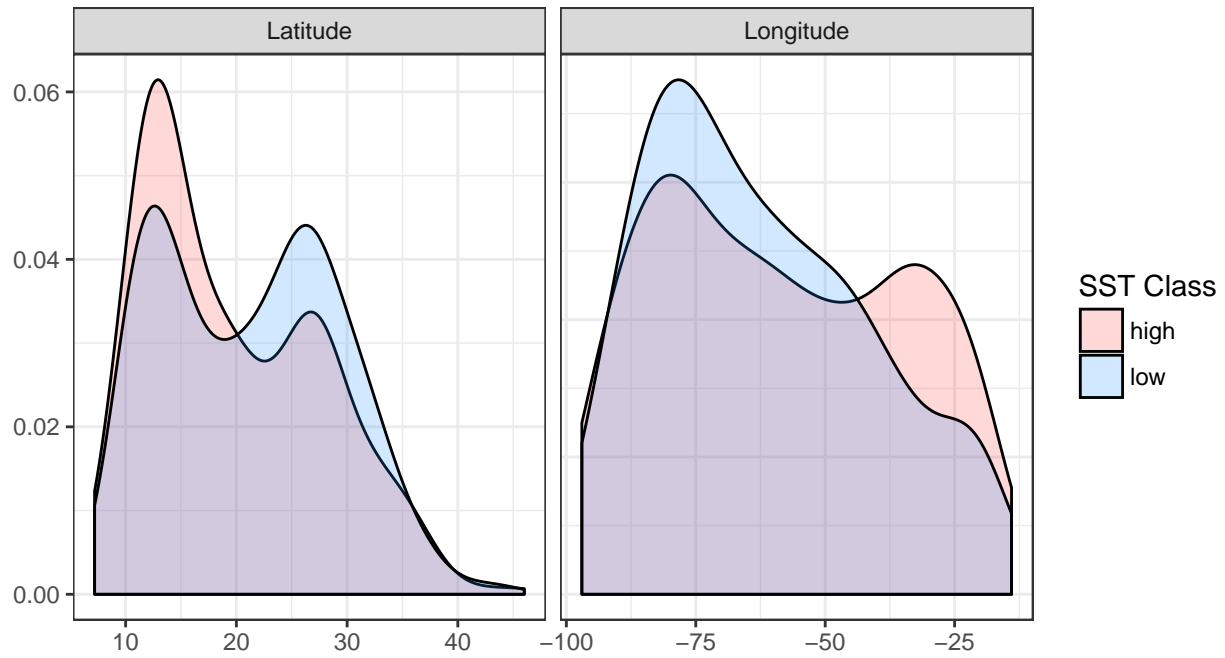


```
plot_positions_histogram("NATL", "last") + theme_bw()
```

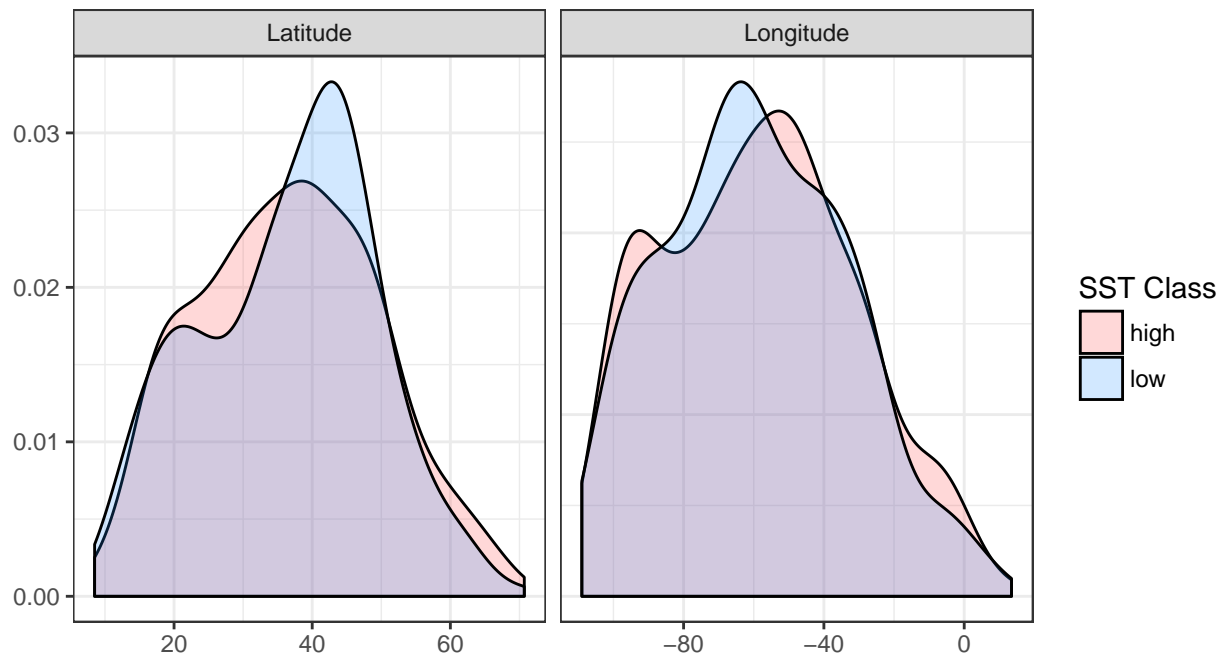


## Developing systems (NATL)

```
plot_positions_histogram("NATL", "first", 33) + theme_bw()
```



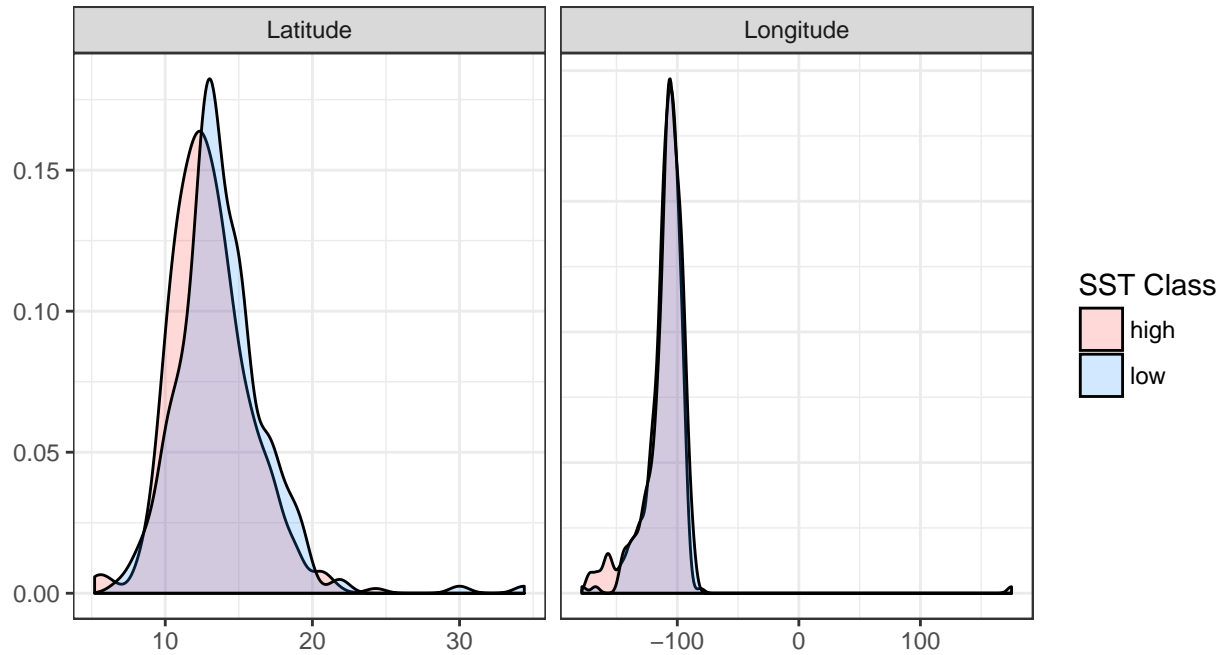
```
plot_positions_histogram("NATL", "last", 33) + theme_bw()
```



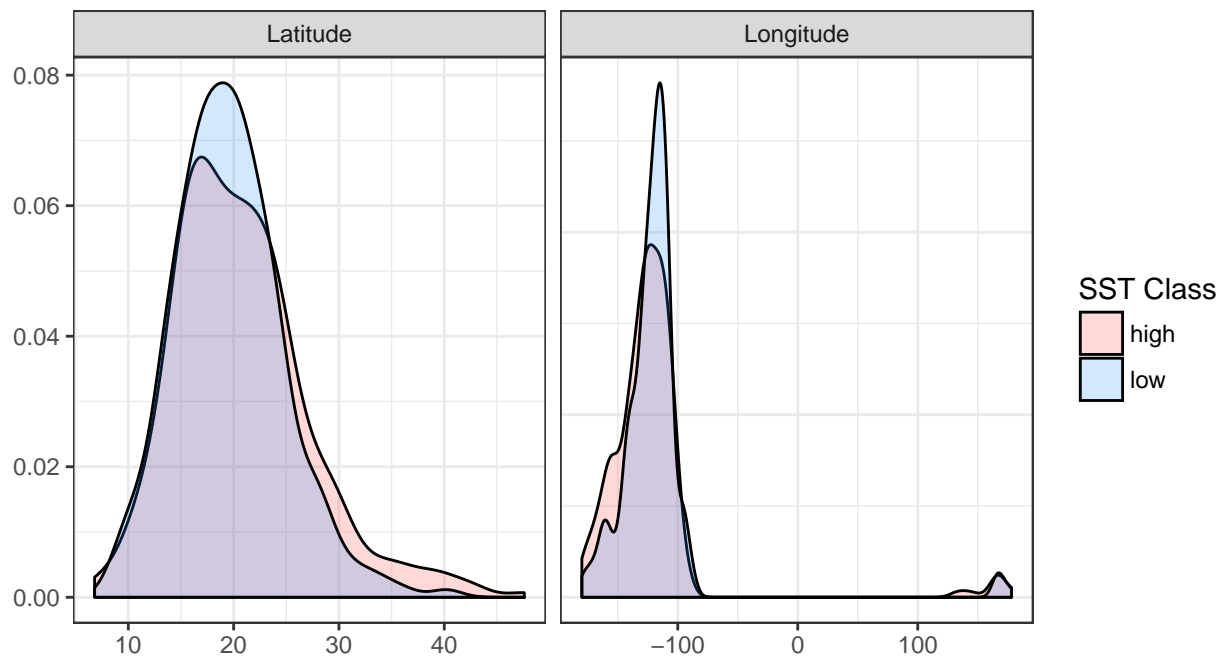
## East Pacific

Todas las tormentas (EPAC)

```
plot_positions_histogram("EPAC", "first") + theme_bw()
```

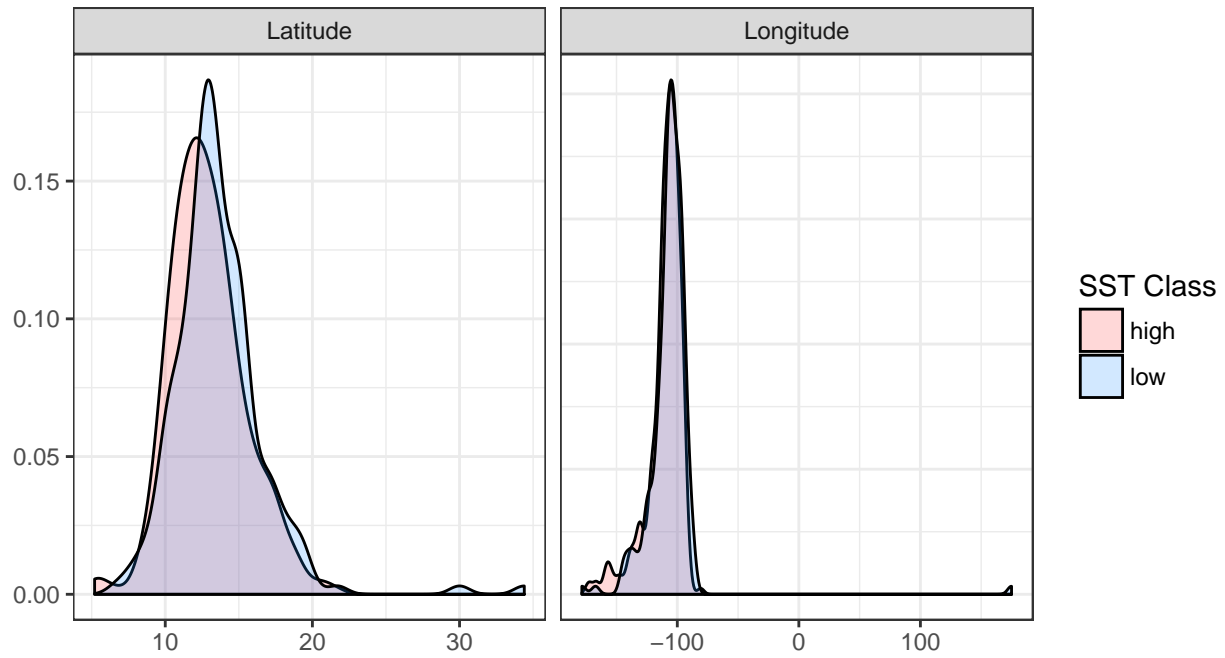


```
plot_positions_histogram("EPAC", "last") + theme_bw()
```

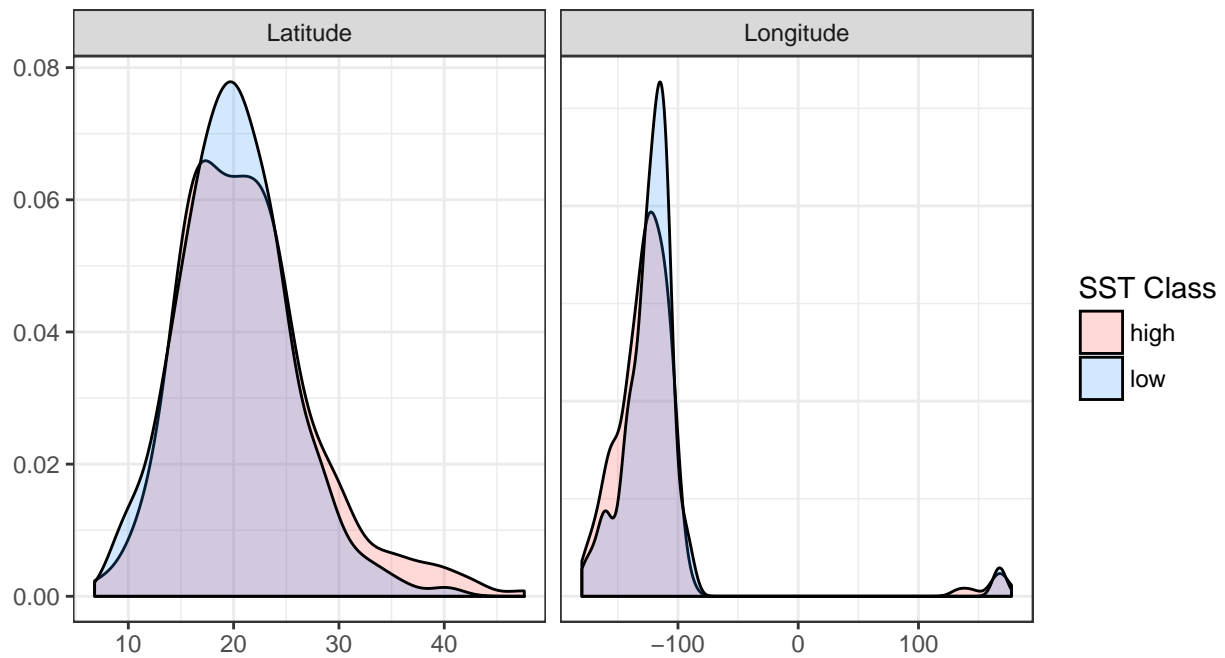


## Developing systems (EPAC)

```
plot_positions_histogram("EPAC", "first", 33) + theme_bw()
```



```
plot_positions_histogram("EPAC", "last", 33) + theme_bw()
```



## Mirando las medias

### Todas las tormentas

```
get_stat_summary("NATL")
```

```
## # A tibble: 2 x 5
##   sst.class mean.first.lat mean.last.lat mean.first.long mean.last.long
##   <chr>          <dbl>          <dbl>          <dbl>          <dbl>
## 1 high           19.5           34.7          -58.7          -59.4
## 2 low            20.8           33.1          -59.4          -59.4
```

```
get_stat_summary("EPAC")
```

```
## # A tibble: 2 x 5
##   sst.class mean.first.lat mean.last.lat mean.first.long mean.last.long
##   <chr>          <dbl>          <dbl>          <dbl>          <dbl>
## 1 high           13.1           20.7          -112.          -120.
## 2 low            13.8           19.6          -108.          -118.
```

### Developing systems

```
get_stat_summary("NATL", 33)
```

```
## # A tibble: 2 x 5
##   sst.class mean.first.lat mean.last.lat mean.first.long mean.last.long
##   <chr>          <dbl>          <dbl>          <dbl>          <dbl>
## 1 high           19.7           36.6          -58.6          -58.4
## 2 low            21.3           36.6          -62.4          -59.3
```

```
get_stat_summary("EPAC", 33)
```

```
## # A tibble: 2 x 5
##   sst.class mean.first.lat mean.last.lat mean.first.long mean.last.long
##   <chr>          <dbl>          <dbl>          <dbl>          <dbl>
## 1 high           12.9           21.3          -111.          -120.
## 2 low            13.6           20.2          -106.          -118.
```