

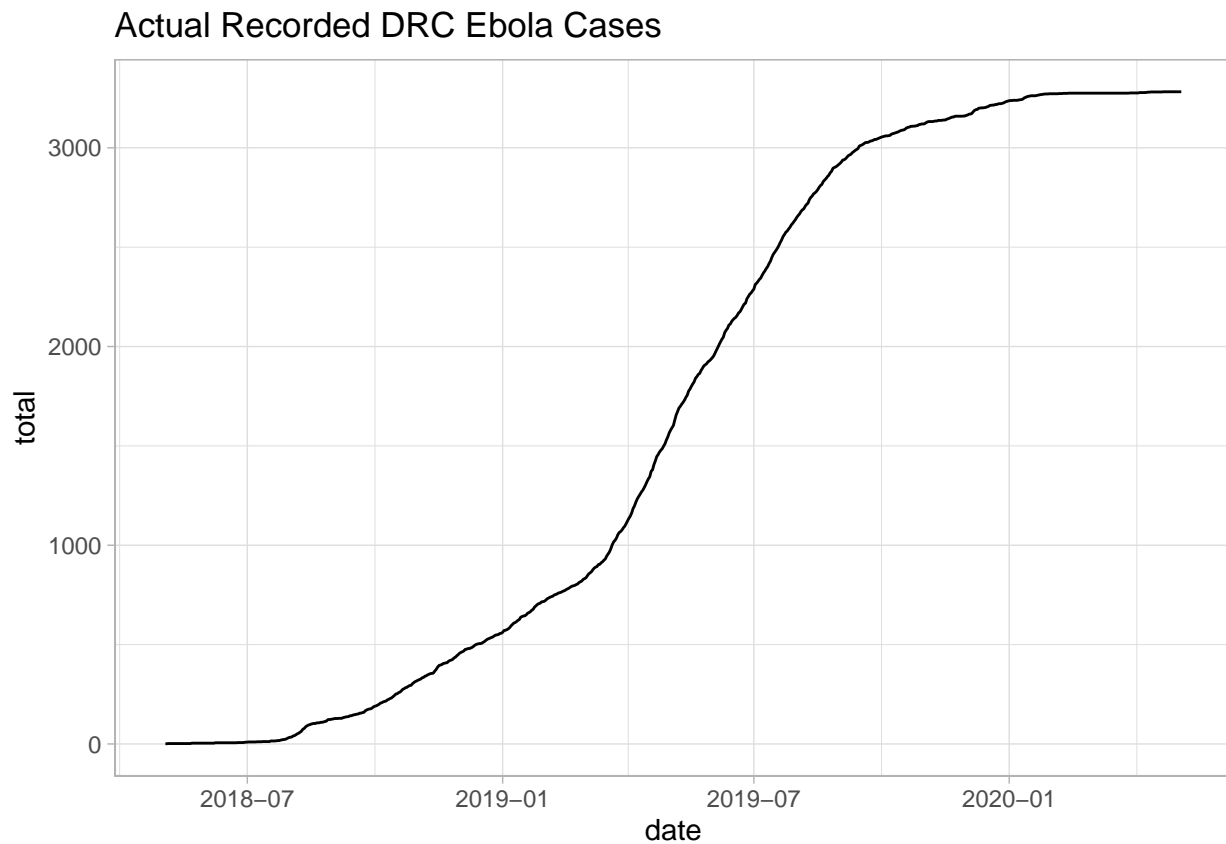
Ebola Forecasting Analysis

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Actual Recorded DRC Ebola Cases

```
p <- ggplot(data = true,
            mapping = aes(x = date, y = total)) +
  geom_line() + theme_light() # grapho of runinng total of cases
p + labs(title = "Actual Recorded DRC Ebola Cases")
```



```
max(ymd("2020-09-23", "2020-10-12", "2019-12-30"))
```

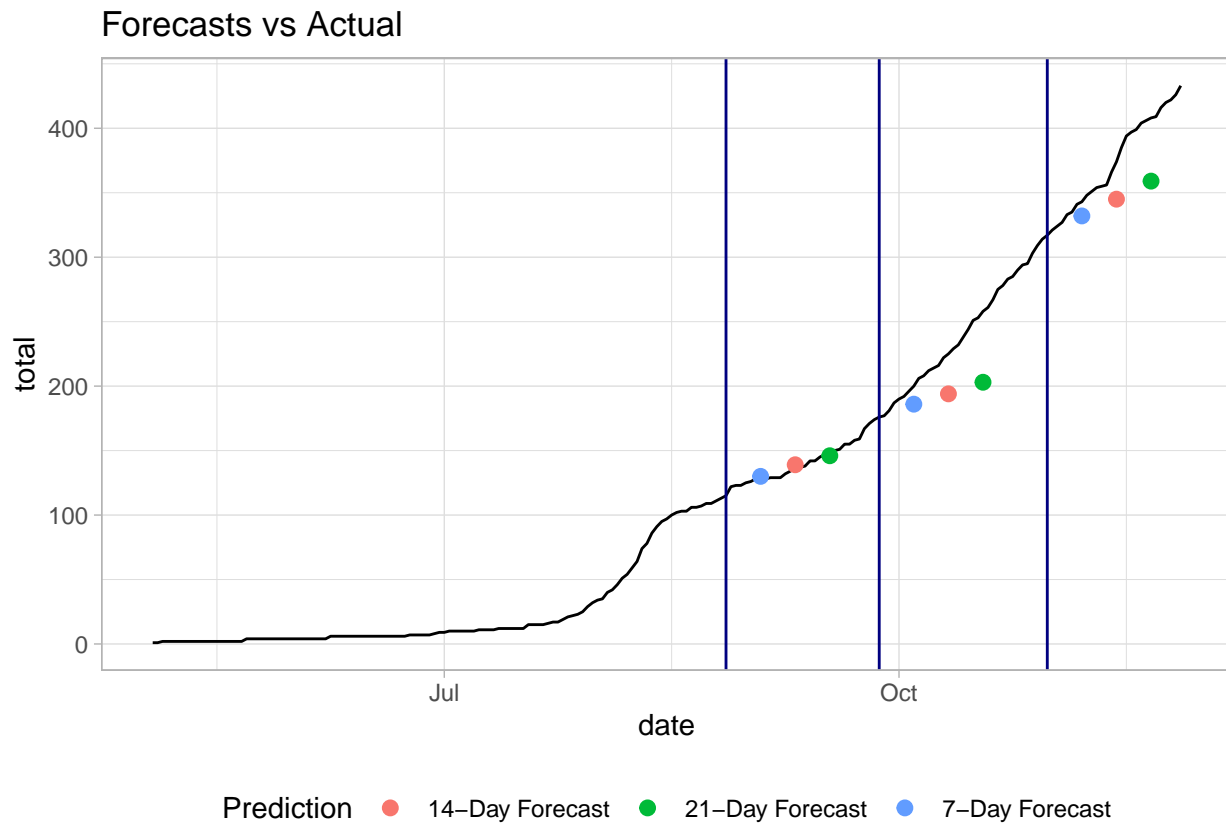
```
## [1] "2020-10-12"
```

Accuracy of Hawkes Projections

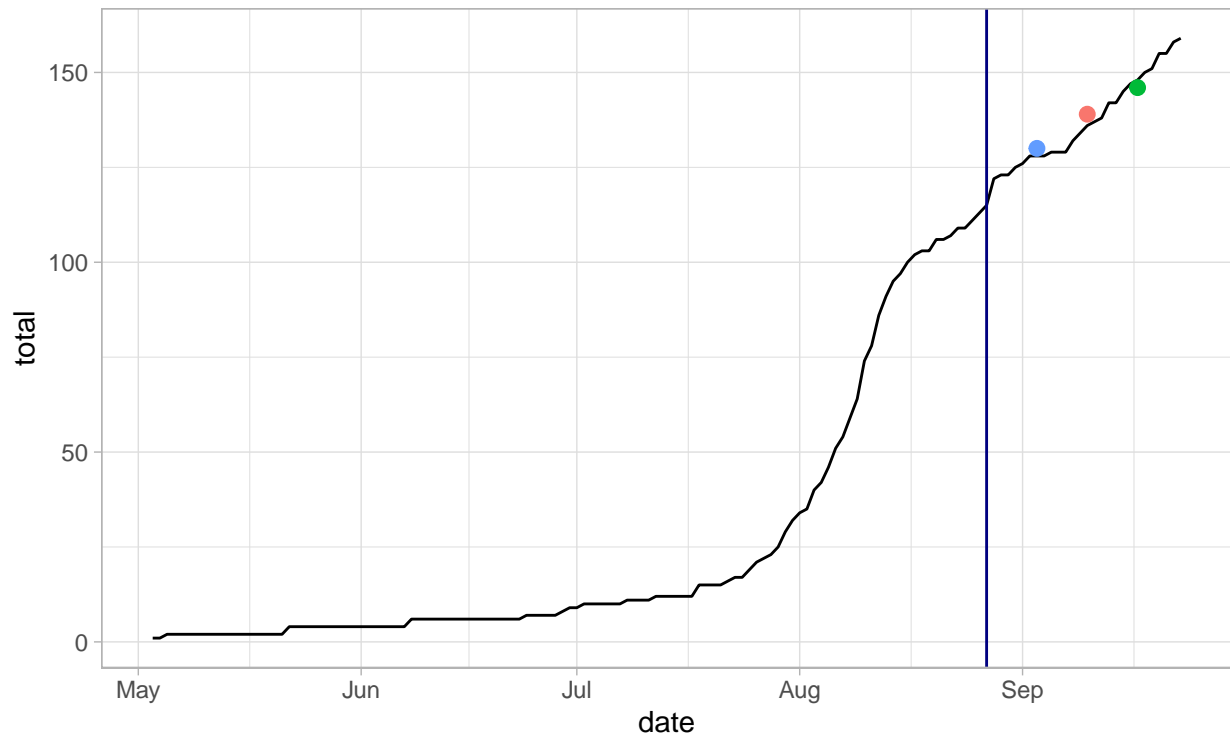
Forecast Projections

```
source("outbreak_vis.R")

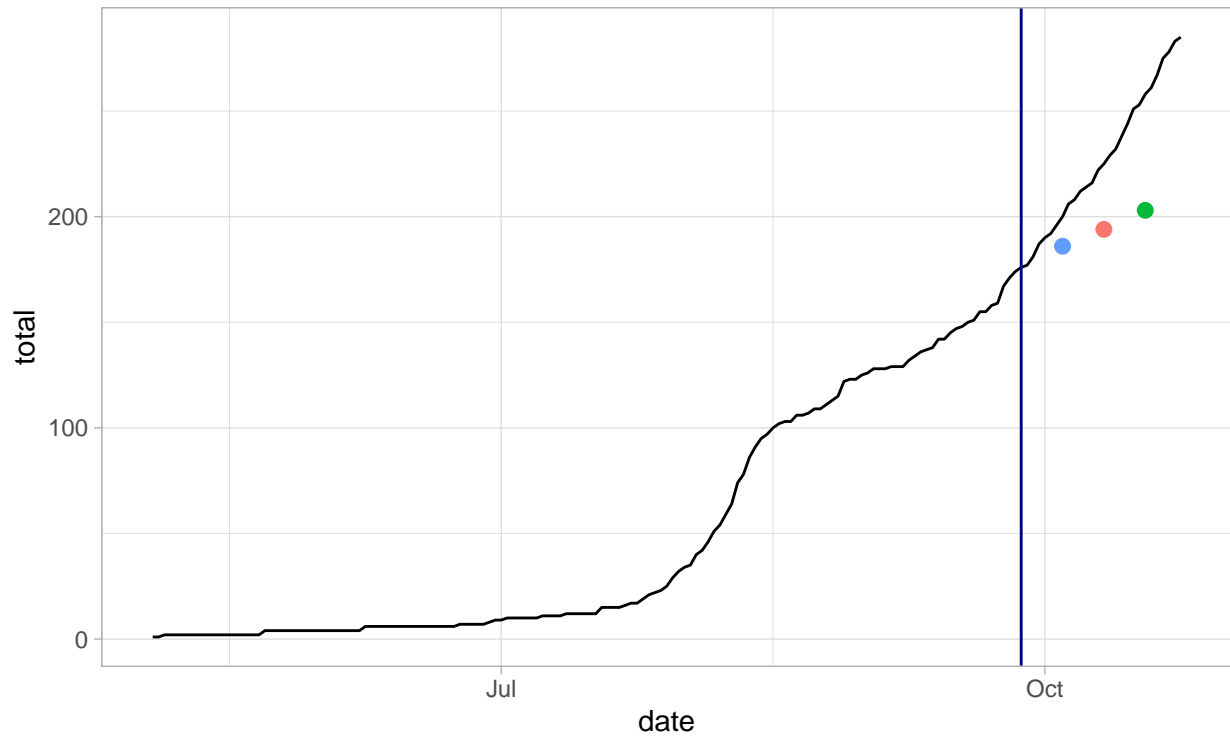
dv <- c("2018-08-27", "2018-09-27", "2018-10-31")
mt <- cbind(c(15, 24, 31), c(10, 18, 27), c(15, 28, 42))
multi_forecast(dv, mt, title = "Forecasts vs Actual") #shows predicted vs actual for three forecasts
```



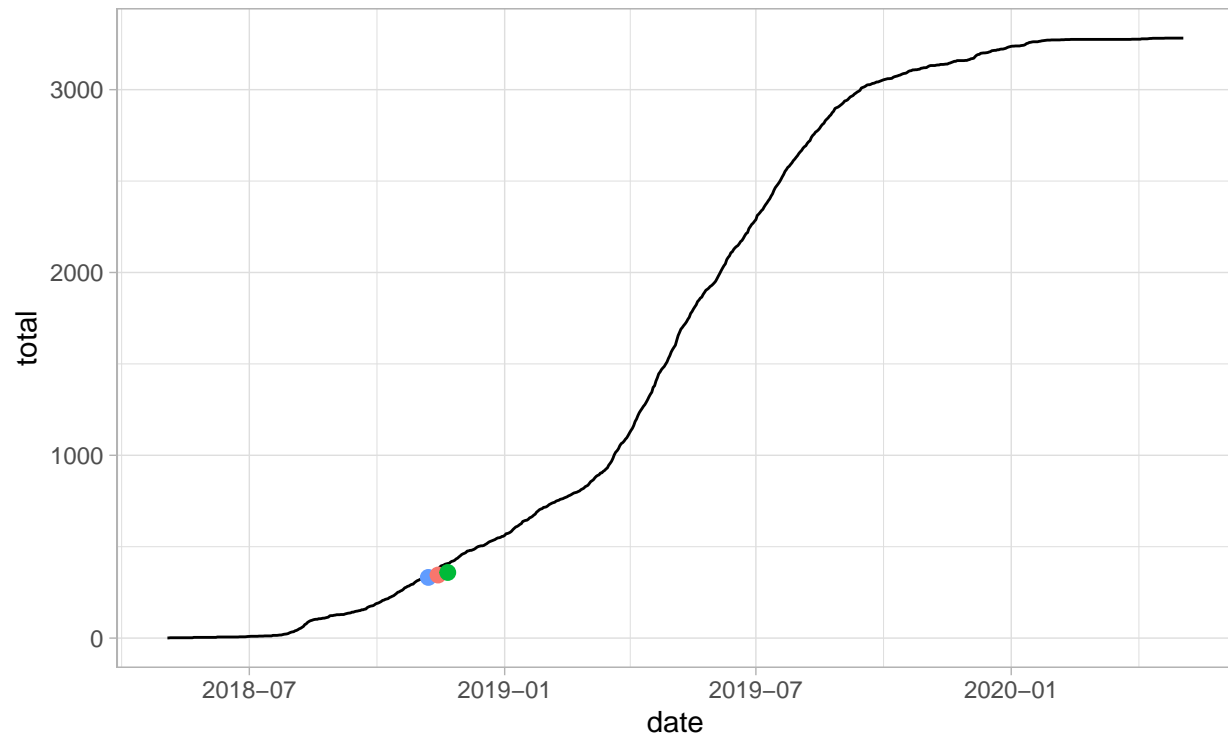
```
multi_forecast("2018-08-27", c(15, 24, 31)) #shows predicted vs actual for one forecast
```



```
multi_forecast("2018-09-27",c(10,18,27)) #shows predicted vs actual for one forecast
```



```
full_forecast("2018-10-31",c(15,28,42))
```



Prediction ● 14-Day Forecast ● 21-Day Forecast ● 7-Day Forecast

#shows predicted vs actual for one forecast wrt entire outbreak