Time with Boxplots, Linerange, Title & Ribbon

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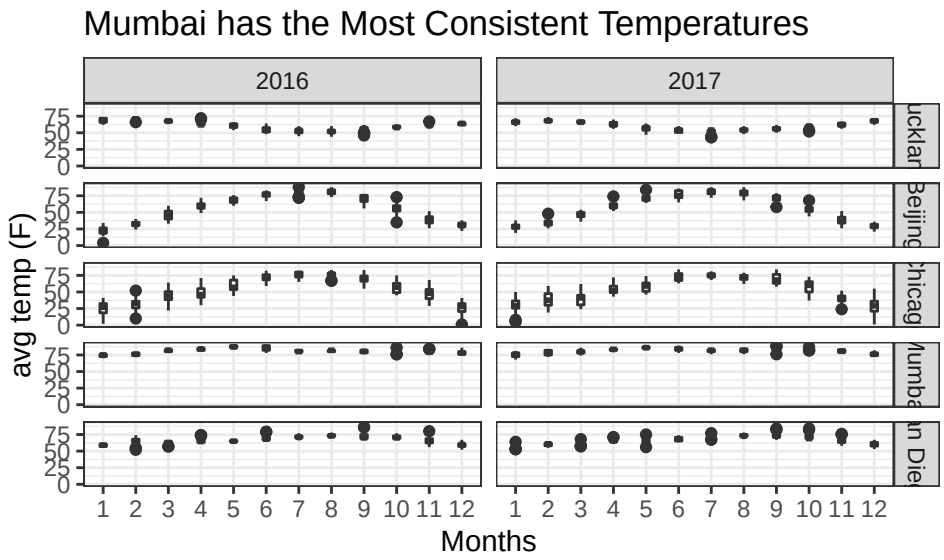
Part 1: Data Setup

```
data("Weather")
head(Weather)
```

```
## # A tibble: 6 x 25
##   city     date        year month   day high_temp avg_temp low_temp high_dewpt
##   <chr>    <date>     <dbl> <int> <dbl>     <dbl>    <dbl>    <dbl>      <dbl>
## 1 Auckland 2016-01-01  2016     1     1        68       65       62         64
## 2 Auckland 2016-01-02  2016     1     2        68       66       64         64
## 3 Auckland 2016-01-03  2016     1     3        77       72       66         70
## 4 Auckland 2016-01-04  2016     1     4        73       66       60         66
## 5 Auckland 2016-01-05  2016     1     5        69       62       55         55
## 6 Auckland 2016-01-06  2016     1     6        69       63       57         54
## # ... with 16 more variables: avg_dewpt <dbl>, low_dewpt <dbl>,
## #   high_humidity <dbl>, avg_humidity <dbl>, low_humidity <dbl>, high_hg <dbl>,
## #   avg_hg <dbl>, low_hg <dbl>, high_vis <dbl>, avg_vis <dbl>, low_vis <dbl>,
## #   high_wind <dbl>, avg_wind <dbl>, low_wind <dbl>, precip <chr>, events <chr>
```

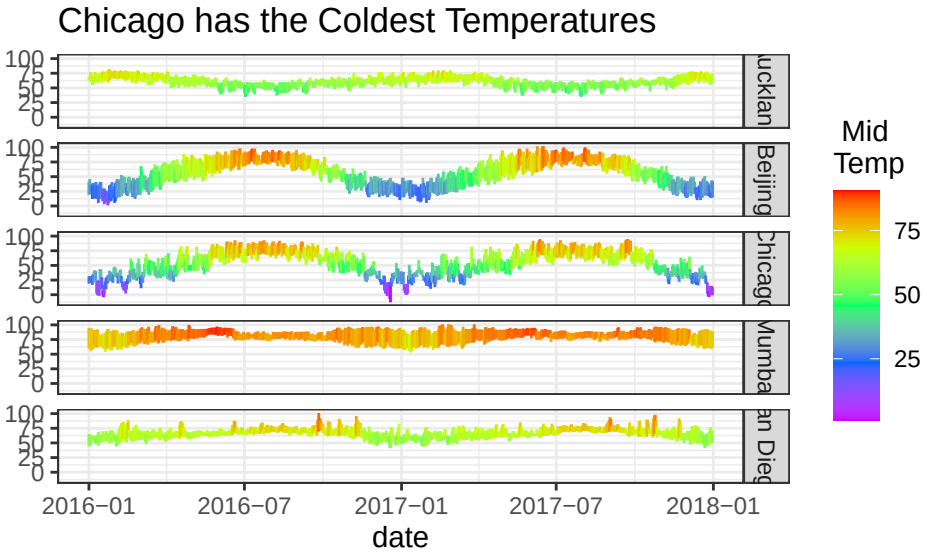
Part 2: Boxplots & Multiple Facets

```
gf_boxplot(avg_temp~as.factor(month),data=Weather, width = 0.2) %>%
  gf_labs(x = "Months", title = "Mumbai has the Most Consistent Temperatures") %>%
  gf_facet_grid(city ~ year)
```



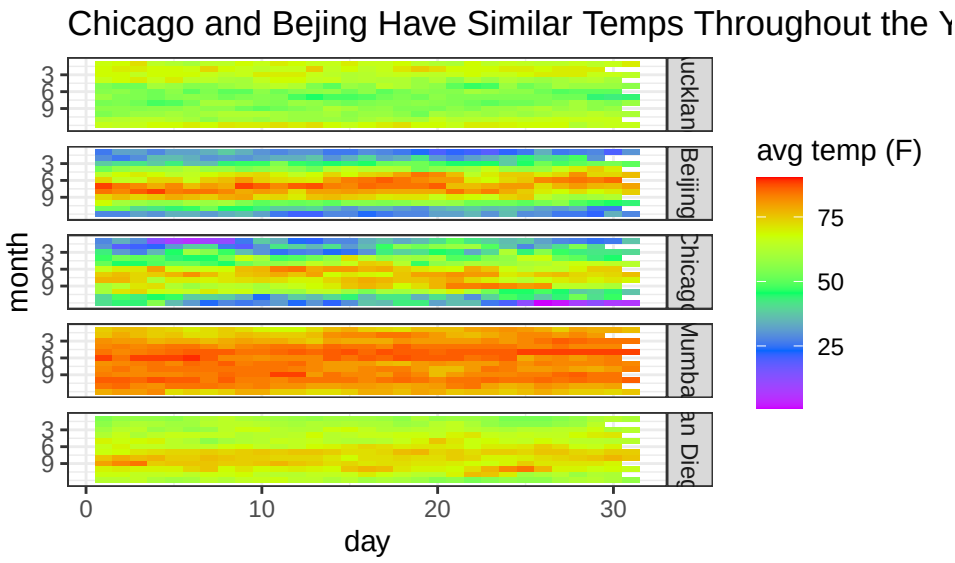
Part 3: Linerange Plot

```
gf_linerange(low_temp+high_temp ~ date| city ~ ., data=Weather,
             color = ~(low_temp+high_temp)/2) %>%
  gf_refine(scale_color_gradientn(colors = rev(rainbow(5)))) %>%
  gf_labs(color = " Mid\nTemp", title = "Chicago has the Coldest Temperatures")
```



Part 4: A Year in Tiles

```
gf_tile(month~day, data = subset(Weather, year=2016), fill=~avg_temp) %>%
  gf_facet_grid(city ~ .) %>%
  gf_refine(scale_fill_gradientn(colors = rev(rainbow(5))),
            scale_y_reverse(breaks = c(3,6,9))) %>%
  gf_labs(title="Chicago and Bejing Have Similar Temps Throughout the Year")
```



Part 5: Highlighted Ribbon

```
# Original Graph
gf_ribbon(low_temp + high_temp ~ date,
          data = transform(Weather,city = NULL), fill = "Gray85") %>%
# City Graphs
gf_ribbon(low_temp+high_temp~date|city, data=Weather, fill=~city) %>%
  gf_theme(theme_classic()) %>%
  gf_theme(legend.position="none") %>%
  # %b = Month %y = 2 Digit Year
  gf_refine(scale_x_date(date_breaks = "8 months", date_labels = "%b %y")) %>%
  gf_labs(x = "Date", y = "Temps", title = "Bejing and Chicago Have Huge Variations In Temperatures")
```