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FORECASTING

PRINCIPLES AND PRACTICE

A comprehensive introduction to the latest forecasting methods using R. Learn to improve your forecast accuracy using dozens of real data examples.



3RD EDITION

 **OTexts**
OPEN TEXTS FOR PRACTICE

2. Time series graphics

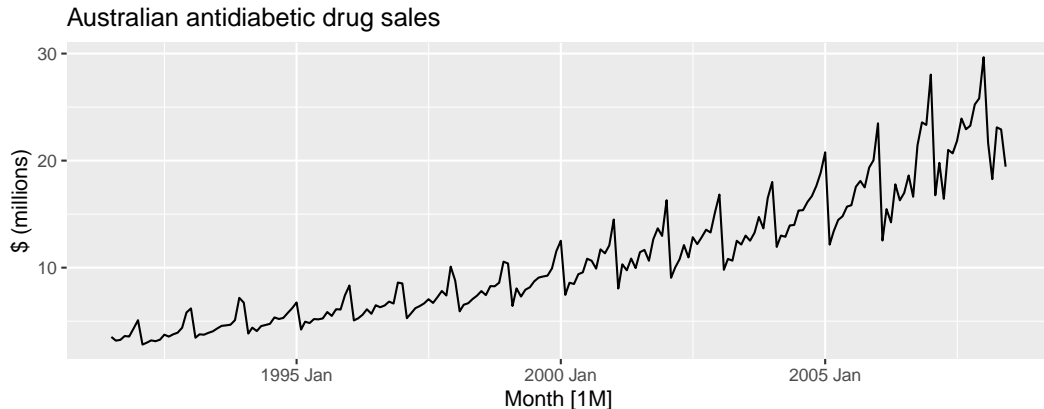
2.2 Time plots

OTexts.org/fpp3/

- Plots allow us to identify:
 - ▶ Patterns;
 - ▶ Unusual observations;
 - ▶ Changes over time;
 - ▶ Relationships between variables.

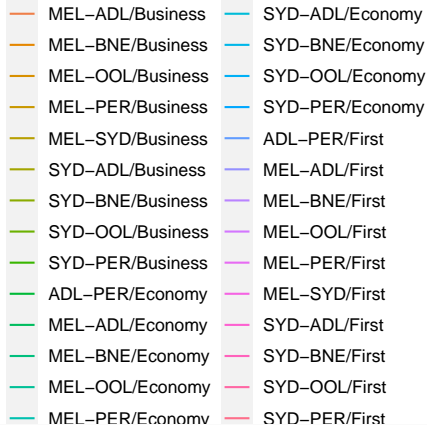
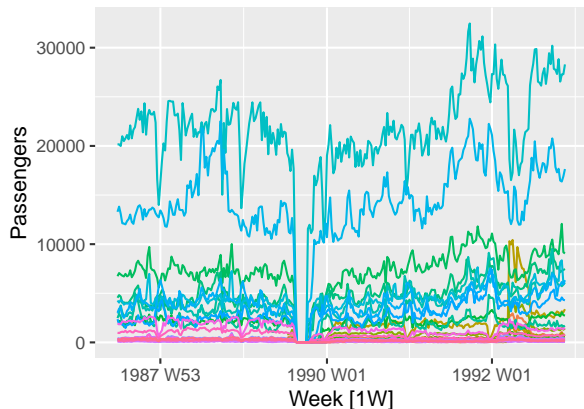
Time plots

```
a10 |>  
  autoplot(Cost) +  
  labs(y = "$ (millions)", title = "Australian antidiabetic drug sales")
```



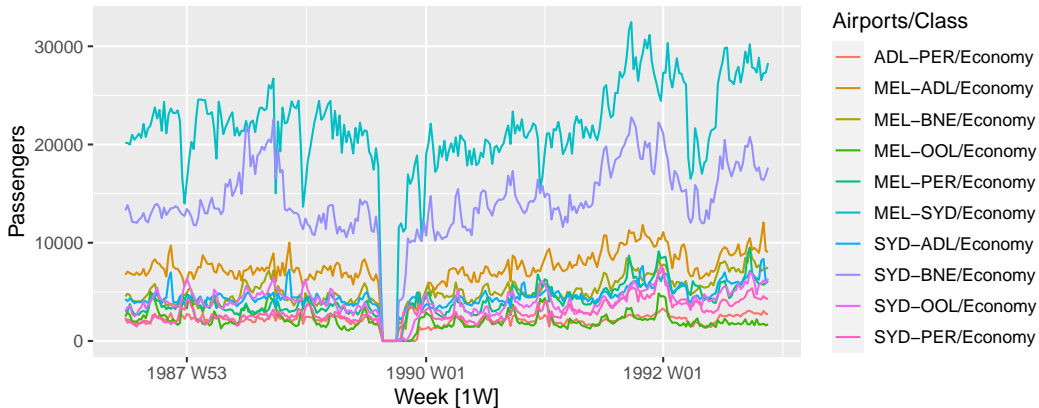
Ansett airlines

```
ansett |>  
  autoplot(Passengers)
```



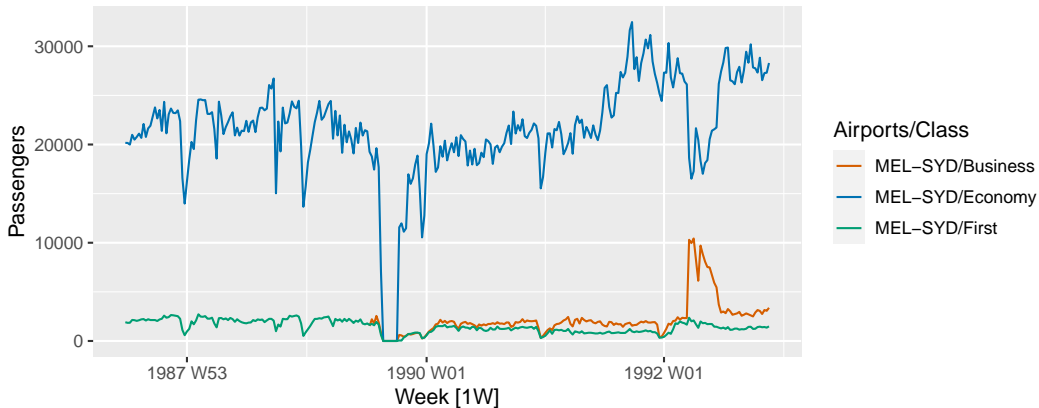
Ansett airlines

```
ansett |>  
  filter(Class == "Economy") |>  
  autoplot(Passengers)
```



Ansett airlines

```
ansett |>  
  filter(Airports == "MEL-SYD") |>  
  autoplot(Passengers)
```



Ansett airlines

