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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

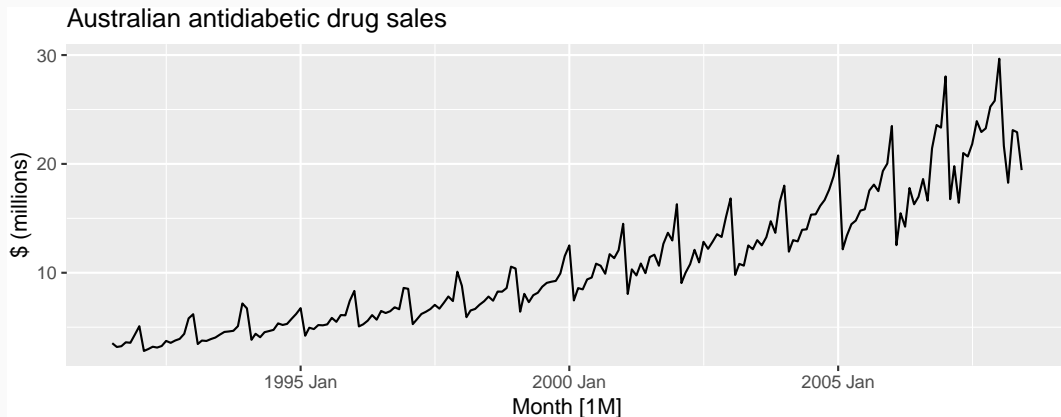
### 2.2 Time plots

[OTexts.org/fpp3/](https://OTexts.org/fpp3/)

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

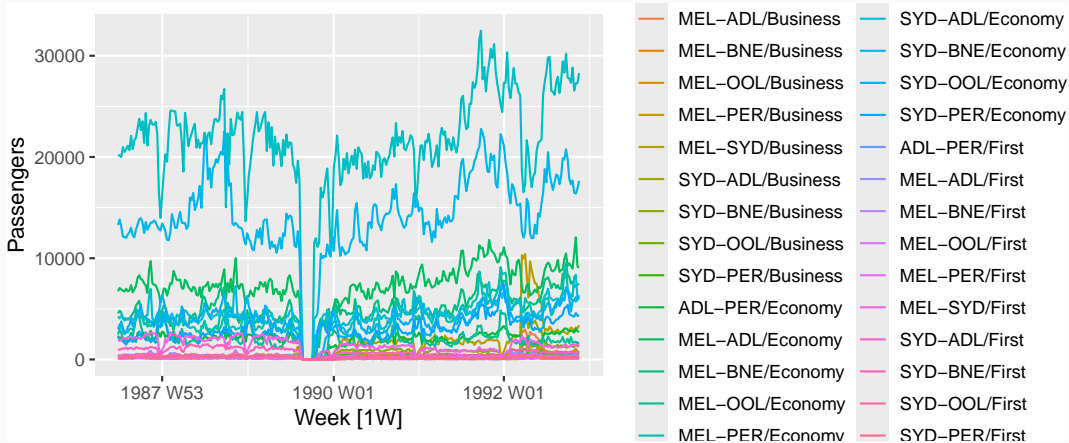
# Time plots

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



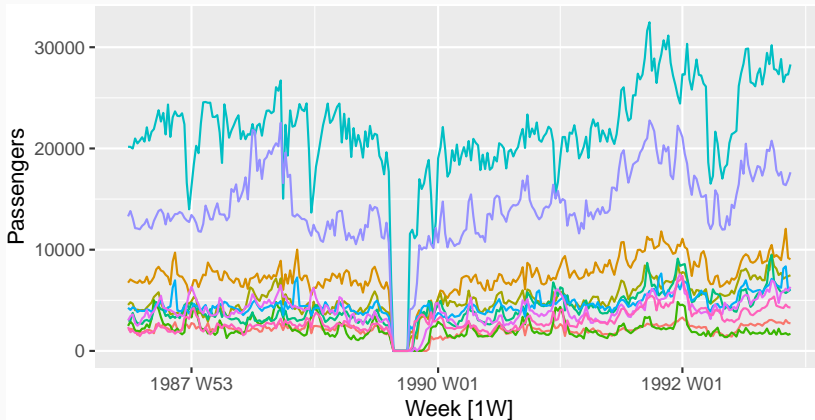
# Ansett airlines

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



# Ansett airlines

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

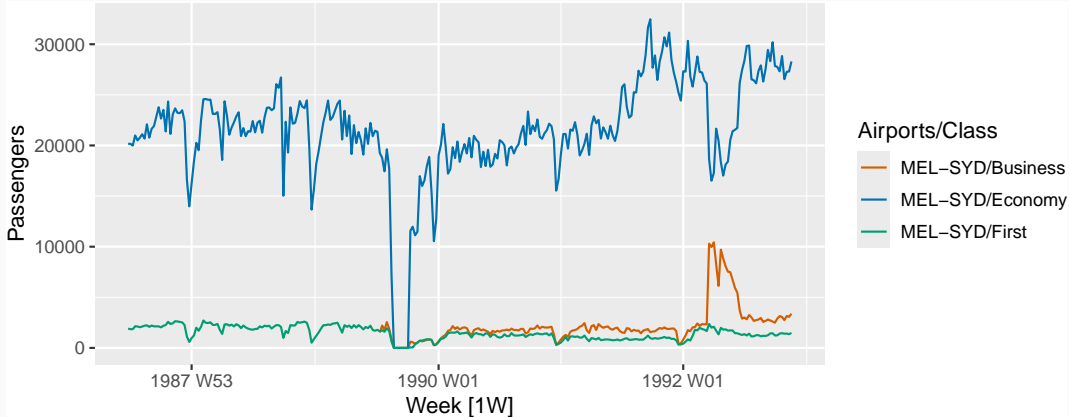


## Airports/Class

- ADL-PER/Economy
- MEL-ADL/Economy
- MEL-BNE/Economy
- MEL-OOL/Economy
- MEL-PER/Economy
- MEL-SYD/Economy
- SYD-ADL/Economy
- SYD-BNE/Economy
- SYD-OOL/Economy
- SYD-PER/Economy

# Ansett airlines

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



# Ansett airlines

