A short title here

A sightly more detailed subtitle here

Your Name

Abstract

This is a template for X-13 stories, descriptions of seasonal adjustment discussions that can be turned into **PDFs** or into **interactive stories**.

```
## Warning: package 'seasonal' was built under R version 4.3.1
```

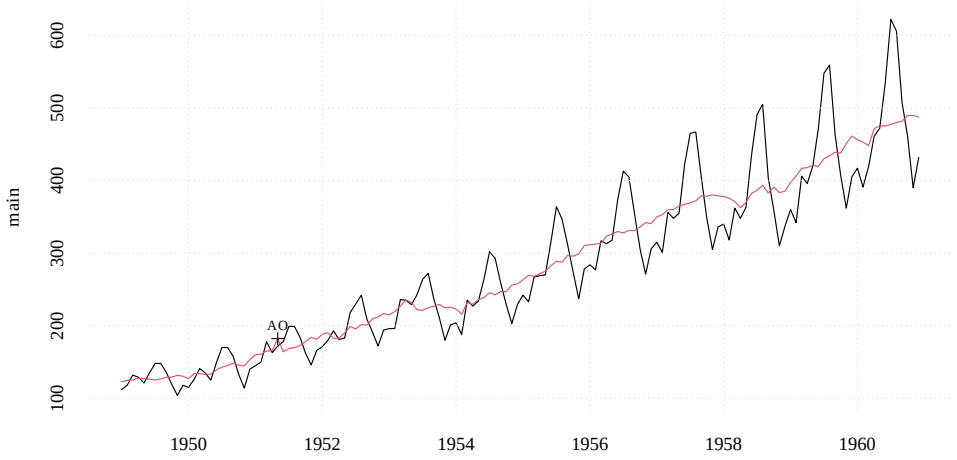

Figure 1: Captions are only shown in the PDF, not in the interactive story.

A main header

This is a template for X-13 stories, descriptions of seasonal adjustment discussions that can be turned into PDFs or into interactive stories. For a more extensive description of the approach, see the vignette.

Use `h2` header (`##`) as top headers, so you can wrap several stories in a book, separating them with `h1` headers (`#`).

To initiate a new page in an **interactive story**, use `x13page()`. The function takes an object of class `"seas"` as its first argment, and a chararacter string describing the series shown on the page as its second. For a list of all available series, see the `series` function from the seasonal package.

Everything you write after a call to `x13page()` will appeare on that page. To start a new page, simply invoke `x13page()` again.

By default `x13page()` will also inlclude a plot into a **PDF**, but this can be changed by setting `pdf = FALSE`. If you want to include a customized graph in a PDF, the `prettify()` function allows you to give seasonal and

R base plots a look that works well with the document template. Note that this plot will not appear in an interactive story:

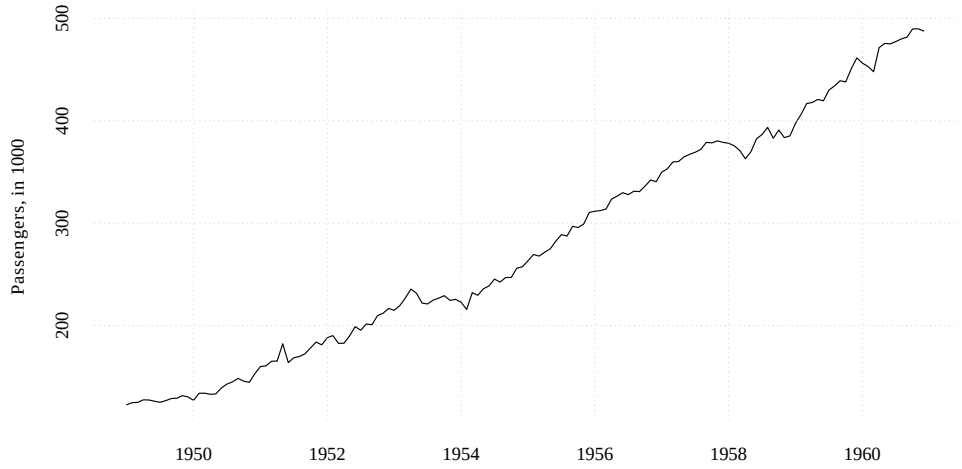

Figure 2: A pretty time series in my PDF.

A sub header

You can use arbitrary code in your document. Note that evaluations of R code are not shown in interactive stories.

```
dput(AirPassengers)
```

You can also use LaTeX-style math both for PDFs and and the interactive view:

$$X_t = T_t + S_t + I_t$$

Inlined math, $E = mc^2$, is possible as well.

You can include your own data into the code. Use `dput` to transform an existing series in your workspace into R code:

Tables

This is still a bit experimental and subject to further changes.

You can add tables using the standard R Markdown syntax. The `xtable` function allows you to produce a nice PDF table. The following produces no output in interactive stories, since we have the summary (and the X-13 output) available all the time, so we can reference to them.

The `data.frame` argument requires the latest dev Version of `seasonal`, which is not yet on CRAN.

% latex table generated in R 4.3.0 by xtable 1.8-4 package % Sun Oct 15 22:51:29 2023

% latex table generated in R 4.3.0 by xtable 1.8-4 package % Sun Oct 15 22:51:29 2023

% latex table generated in R 4.3.0 by xtable 1.8-4 package % Sun Oct 15 22:51:29 2023

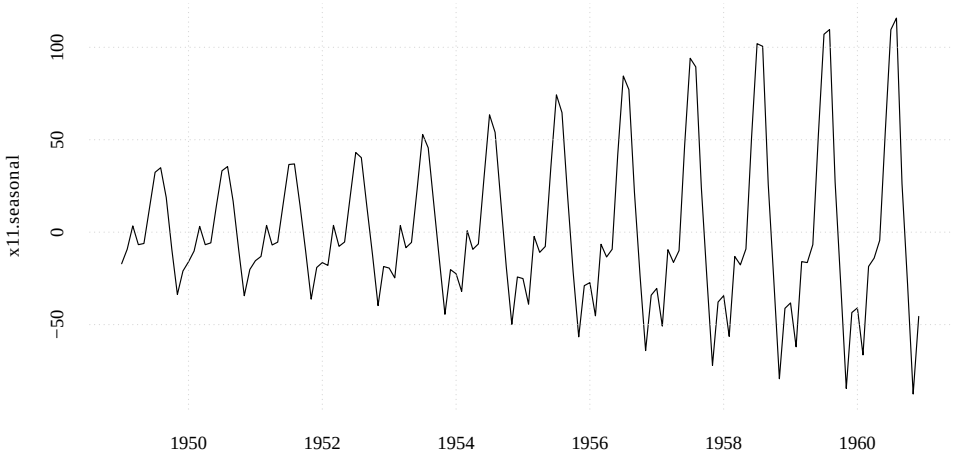

Figure 3: A second X-13 view.

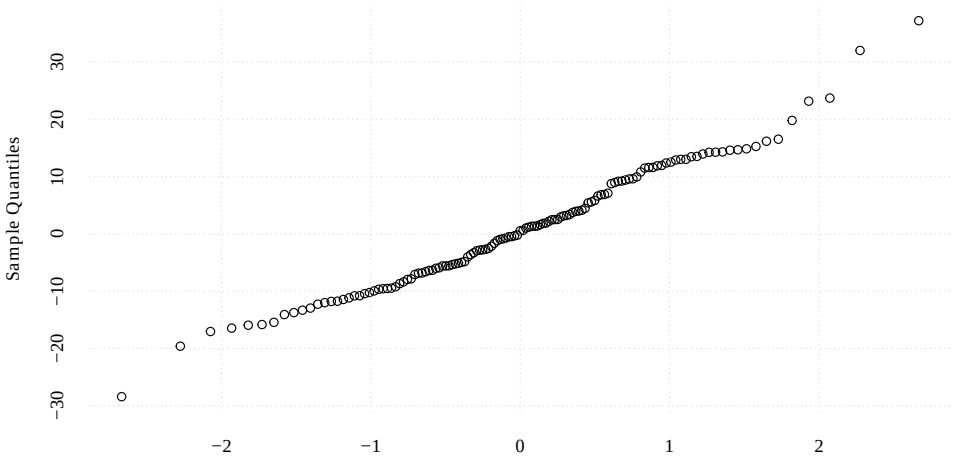

Figure 4: And and example of a pretty QQ-plot in my PDF.

date	final	seasonal	seasonaladj	trend	irregular	adjustfac
-7670.00	121.72	0.91	121.72	122.24	1.00	0.92
-7639.00	124.52	0.96	124.52	124.33	1.00	0.95
-7611.00	125.40	1.07	125.40	126.21	0.99	1.05
-7580.00	128.91	0.99	128.91	127.61	1.01	1.00

Table 1: Adjusted and unadjusted data.

Stat	Value
M01	0.04
M02	0.04
M03	0.00
M04	0.28
M05	0.19
M06	0.70
M07	0.20
M08	0.42
M09	0.37
M10	0.43

Table 2: X-11 M Statistics

term	estimate	std.error	statistic	p.value
Weekday	-0.00	0.00	-5.64	0.00
Easter[1]	0.02	0.01	2.48	0.01
AO1951.May	0.10	0.02	4.90	0.00
MA-Nonseasonal-01	0.12	0.09	1.35	0.18
MA-Seasonal-12	0.50	0.08	6.42	0.00

Table 3: Coefficient Overview