

# SQL Report: Your title goes here

Your Name

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An abstract is absolutely not necessary and you can simply drop or comment this part. Alternatively, you can use it to place your contact details:

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## 1 Temperature indices

### 1.1 SQL code

An overview of temperature indices was implemented using a `VIEW` as defined in listing 1

Listing 1: create statement for view

```
1  — Template for creating the final view
2  DROP VIEW IF EXISTS temperature_indices;
3  CREATE VIEW temperature_indices AS
4      SELECT * FROM metadata;
```

### 1.2 discuss

In the next paragraph discuss the differences between the Postgres and R solution for calculating temperature indices. Name a few advantages **and** disadvantages for both solutions.

## 2 Verify results

Compare your SQL calculated indices to the R calculated indices. Do they differ and if they do, why?

## 3 Spatial variability

Describe the variability of your sensor compared to the others this year. You might also want to place some citations. Check out the comments in the source `main.tex` for the

commands. If you want to cite your HOB0 report here, add an bibliography entry to the `bibliography.bib` like:

```
@article{hobo,  
  author={Bar Foo},  
  year=2021,  
  journal={Data collection, -management, -visualization lecture},  
  title={HOB0 Report}  
}
```

You can cite it with the `\citep{hobo}` command (Foo, 2021).

## 4 Indices across time and space

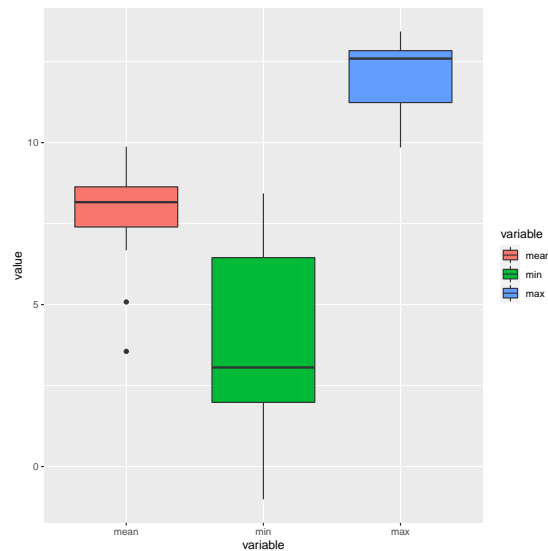


Figure 1: Boxplot of the mean, minimum and maximum hourly, quality checked air temperature in Freiburg on Christmas eve. The data was taken from 52 different locations in 2019, 2020 and 2021. Original measurements were taken with an onset HOB0 temperature data logger.

This last section should focus on the question how this years' measurements compare to the last few years. For this, you are asked to produce a number of graphs. The best practice is to generate PDF graphics and include them directly here. The necessary commands are already loaded in this template.

You can even automate your workflow further and run your scripts producing the PDFs in this repository, saving them to the `./figures/` subfolder. This will refresh the figures in the report whenever, your scripts overwrite them (Fig 1).

The figure above can be included like:

```

\begin{figure}[ht]
  \centering
  \includegraphics[width=.5\textwidth]{./figures/example_analysis}
  \caption{Boxplot of the mean, minimum and maximum hourly, quality
checked air temperature in Freiburg on Christmas eve. The data was
taken from 52 different locations in 2019, 2020 and 2021. Original
measurements were taken with an onset HOB0 temperature data logger.}
  \label{fig:first_figure}
\end{figure}

```

## References

B. Foo. Hobo report. *Data collection, -management, -visualization lecture*, 2021.