

# *CTFP Final Report*

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## *Introduction*

- data analysis
  - import -> .csv to .xlsx
  - tidy -> remove -999, view Dates, remove gaps in data
  - transform -> OX calculation, summary statistics, potential for 8hr rolling average
  - visualize -> time series and correlation plots
  - communicate -> questions students answered.

## *Source of Data*

- ECCC online
  - hourly measurements
- Weather Data

## *Operations in Excel*

- tried a bunch of stuff, and left plenty on the cutting room floor
  - SO2 work
  - using Analysis Toolpak for linear regression (outputs additional parameters hidden from display line of best fit)

Eventually settled on comparing time series & correlations between summer and winter months. Addressed the 5 elements of data analysis highlighted in the intro:

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## *Logistics*

Had to generate unique data for students, and had to be expandable. *run through the r code process highlighting stuff like generating datasets & answer keys*

*Troubles with implementation*

Only uploaded 15 winter and 15 summer datasets. Unfamiliarity & Disconnect between me and Quercus/Teaching Staff hampered some of the broader implementations.