

ACCOLEDS Training Workshop 2000

University of Manitoba December 6-7, 2000

Retrieving Multiple CANSIM Time Series

In this exercise you will search for data on the price of **Home Heating Oil** for a number of cities across Canada, retrieving all available series.

1 First proceed to the **CANSIM** database at:

<http://datacentre.chass.utoronto.ca/cansim/>

2. Click on:



3. Then click on:



4. Now enter the terms to search on in the **Search keyword or keywords:** dialog box **Home Heating Oil**

Then select **Full Text Index** option, and then click on the submit search:

Search keyword or keywords:		
Home heating oil		
Index Files	Search Options	Operations
Matrix Catalogue Main Index Full Text Index	Binary search: and	Submit Search
	Search limit: 50	Clear Form

Search Results:

What is the number of matches?
This is the number of series that we will want to retrieve

6. Now Click on the first “P” number [P219113](#) (CANSIM series number).

7. The next page displayed will provide a detailed description of the series and will also list a matrix number, under the heading:

Statistics Canada Classification:

Matrix 09934,

8. Click on the matrix number: [09934](#)

This next page will list all the **P** numbers or *series* that are collected within this *matrix*:
Scroll down to the end of the page until you have all the listing of *series* on **Home Heating Oil**:

- ST. JOHN'S, HOME HEATING OIL ([P219113](#))
- CHARLOTTETOWN/SUMMERSIDE, HOME HEATING OIL ([P219114](#))
- HALIFAX, HOME HEATING OIL ([P219115](#))
- SAINT JOHN, HOME HEATING OIL ([P219116](#))
- QUEBEC, HOME HEATING OIL ([P219117](#))
- MONTREAL, HOME HEATING OIL ([P219118](#))
- OTTAWA, HOME HEATING OIL ([P219119](#))
- TORONTO, HOME HEATING OIL ([P219120](#))
- THUNDER BAY, HOME HEATING OIL ([P219121](#))
- WINNIPEG, HOME HEATING OIL ([P219122](#))
- REGINA, HOME HEATING OIL ([P219123](#))
- SASKATOON, HOME HEATING OIL ([P219124](#))
- VANCOUVER, HOME HEATING OIL ([P219125](#))
- VICTORIA, HOME HEATING OIL ([P219126](#))
- WHITEHORSE, HOME HEATING OIL ([P219127](#))
- YELLOWKNIFE, HOME HEATING OIL ([P219128](#))

Note:

AVERAGE RETAIL PRICE FOR DIESEL FUEL AT FULL SERVICE FILLING STATIONS EXCLUDES THUNDER BAY BECAUSE IT IS NOT APPLICABLE. AVERAGE RETAIL PRICE FOR FUELOIL EXCLUDES EDMONTON AND CALGARY WHICH ARE NOT APPLICABLE.

You will note that the *series* on **Home Heating Oil** prices by City starts at *P219113* And goes to *P219128*

9. In order to retrieve multiple series you will need to return back to the **Search and Retrieve** page:

<http://datacentre.chass.utoronto.ca/cansim/search.html>

10. Click on the “[Retrieve multiple CANSIM series by label](#)” option

11. You will now enter the list of series that you wish to retrieve data for:

Note that series labels in the label list should be comma-separated, and the entire list should be enclosed in parentheses.

(P219113, P219114, P219115, P219116, P219117, P219118, P219119, P219120, P219121, P219122, P219123, P219124, P219125, P219126, P219127, P219128)

In this example we will retrieve data from 1998 to the latest available, so we enter 1998 for the beginning date and leave the end date empty.

We will also select spreadsheet as our output format

Retrieve multiple CANSIM series by label

To retrieve multiple CANSIM series, enter a [label list](#) of a CANSIM series, fill out this form and click on the "Retrieve" button. To reset the retrieval options to their default settings, click on the "Clear" button. Note that series labels in the label list should be comma-separated, and the entire list should be enclosed in parentheses. See the definition of the [label list](#) for details.

Label List:

(P219113, P219114, P219115, P219116, P219117, P219118, P219119, P219120, P219121, P219122, P219123, P219124, P219125, P219126, P219127, P219128)

Retrieve

Clear

If you wish to retrieve data for a specific time period, you can truncate the series by specifying a beginning [date](#) and a terminating [date](#) for your time series.

If you wish to convert the data in the time series from a higher frequency to a lower frequency, select the target [frequency](#) and specify a [conversion method](#) .

You can also select an [output format](#) for your time series.

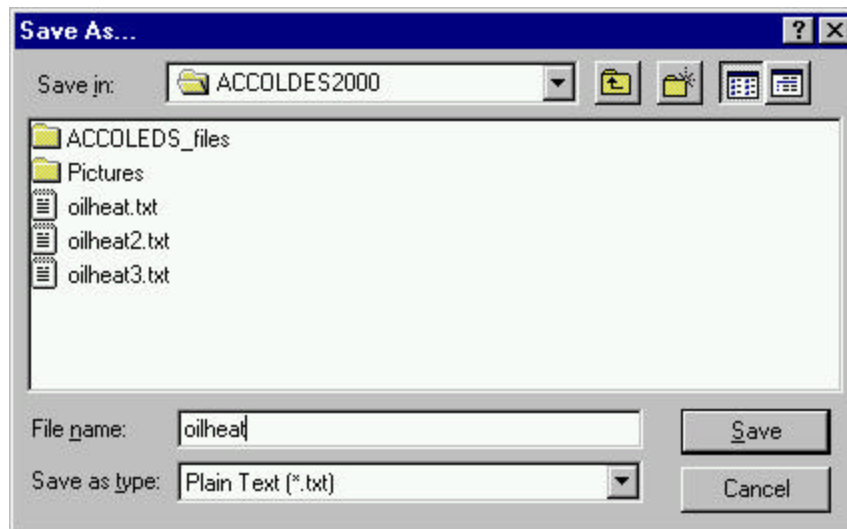
After you have done the above hit the **Retrieve** button

Your out put will look like this:

YYYYMM	P219113	P219114	P219115
1998M01	39.6	37.1	40.4
1998M02	38.9	37.1	39.3
1998M03	37.5	34.8	36.9
1998M04	35.4	34.0	36.8
1998M05	34.3	31.1	36.8
1998M06	34.3	31.1	36.8
1998M07	34.3	31.1	36.8
1998M08	34.3	31.1	36.8

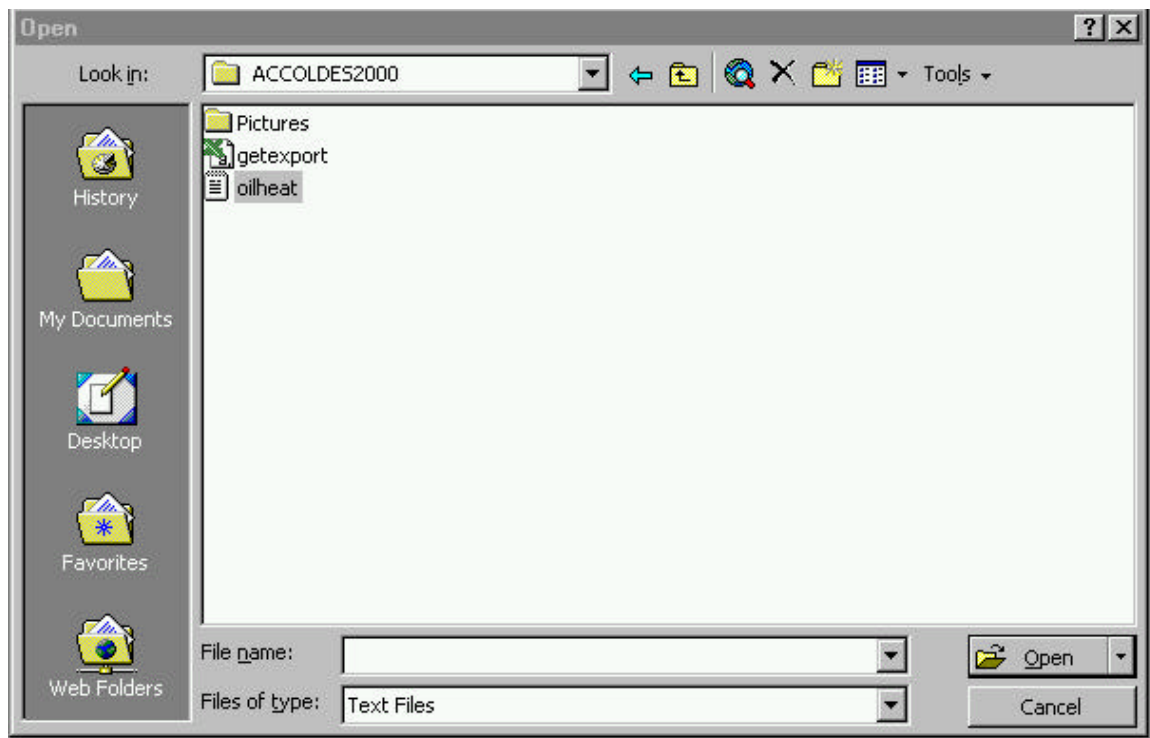
12. Next you will save the results to your local drive for use by other applications, such as **Excel**.

On your browser click on FILE/SAVE AS... or (CTL S) and save the file as a plain text file - give it a meaningful name, e.g. *oilheat.txt*



and then click save

13. Next open your **Excel** program and open the *oilheat* text file.that you saved to your local drive. You will have to set **Excel** to open text files, in the **Files of type** option button



Excel will prompt for some settings as it opens the file. Chose the following settings:

Text Import Wizard - Step 1 of 3

The Text Wizard has determined that your data is Fixed Width.
If this is correct, choose Next, or choose the data type that best describes your data.

Original data type

Choose the file type that best describes your data:

☐ Delimited - Characters such as commas or tabs separate each field.

☒ Fixed width - Fields are aligned in columns with spaces between each field.

Start import at row: File origin:

Preview of file C:\Docs\ACCOLDES2000\oilheat.txt.

	YYYYMM	P219113	P219114	P219115	P219117
1	YYYYMM				
2					
3	1998M01	39.6	37.1	40.4	39.0
4	1998M02	38.9	37.1	39.3	38.6
5	1998M03	37.5	34.8	36.9	37.9

Cancel < Back Next > Finish

click next

Text Import Wizard - Step 2 of 3

This screen lets you set field widths (column breaks).

Lines with arrows signify a column break.

To CREATE a break line, click at the desired position.

To DELETE a break line, double click on the line.

To MOVE a break line, click and drag it.

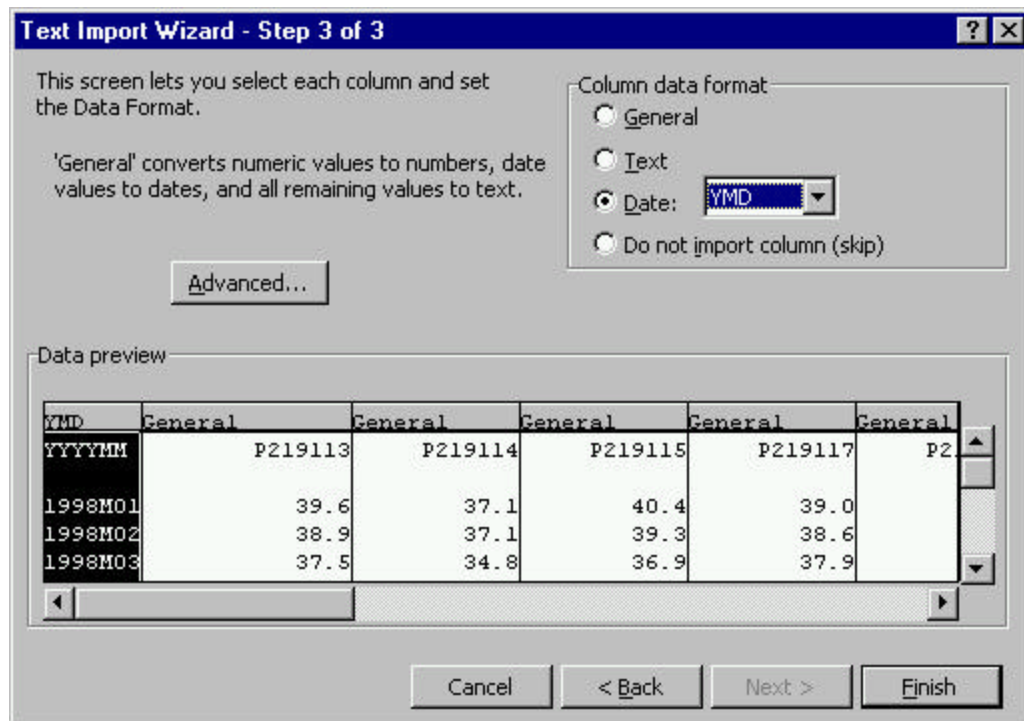
Data preview

	10	20	30	40	50	60
1999M08	39.3	33.8	39.2	37.8		
1999M09	43.0	36.0	42.8	39.0		
1999M10	43.6	36.0	44.3	40.9		
1999M11	44.0	40.5	44.9	43.6		
1999M12	47.0	40.5	48.2	46.3		

Cancel < Back Next > Finish

click next

14. then select the Date button under the **Column data format** option and set the date order to YMD and click finish.

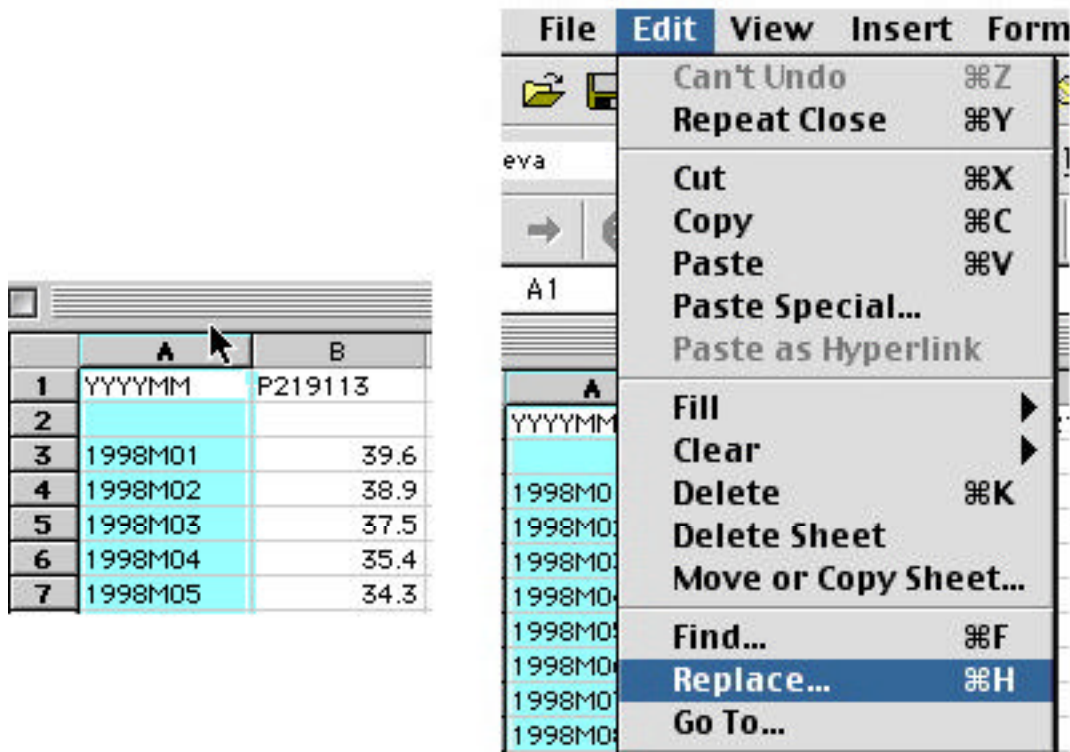


Excel has now formatted the text file.

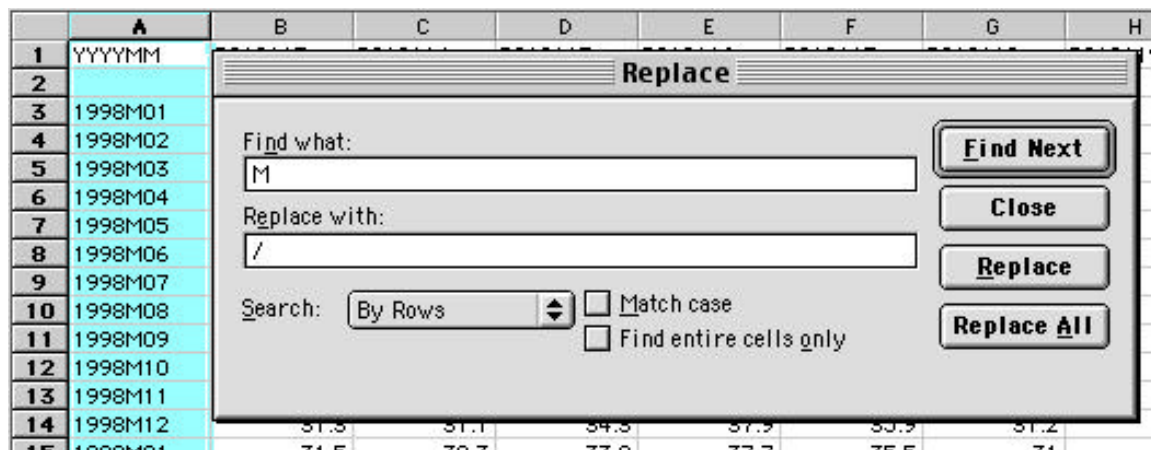
15. You can now edit the file adding some meaningful labels such as names of cities and date. For example:

A	B	C	D	E	F	G
DATE	St. John's	Char/Summ	Halifax	St. John	Quebec	Montreal
1998M01	39.6	37.1	40.4	46.3	39	34.6
1998M02	38.9	37.1	39.3	44	38.6	34.9
1998M03	37.5	34.8	36.9	44	37.9	33.5
1998M04	35.4	34	36.8	42.9	37.1	33.1
1998M05	34.3	31.1	36.8	42.9	37.1	32.8
1998M06	34.3	31.1	36.8	42.9	37.1	32.8
1998M07	34.3	31.1	36.8	42.9	37.1	32.8

16. You will also need to change the format of the date field. CANSIM outputs the data with a "M" in-between the year and month. You can simply change this by selecting the date column (click on the "A" tab), and then click on Edit/Replace ...

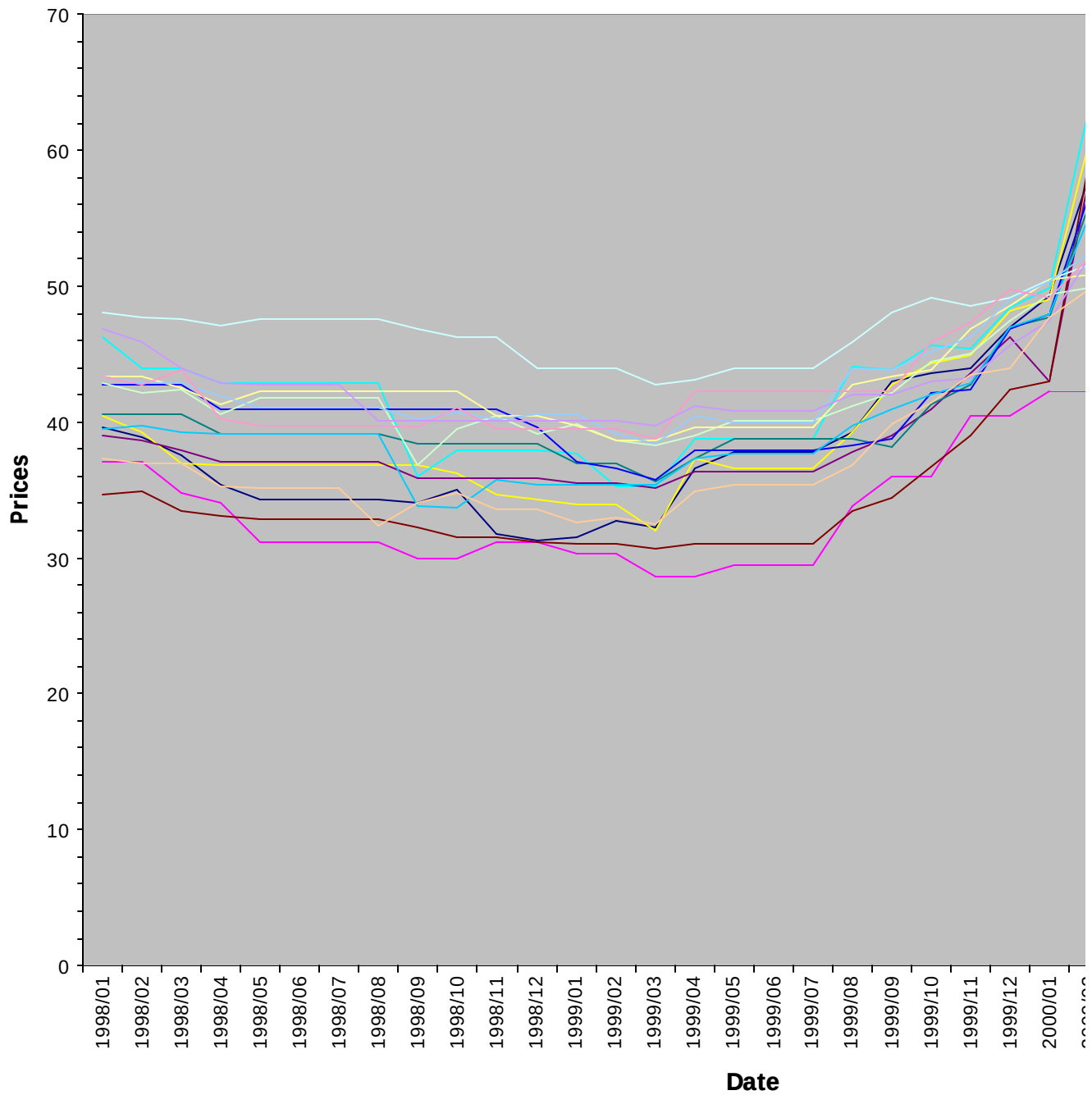


17 Next enter the letter “M” and slash “/” as the characters to be replaced and click on Replace All



18. After you have finished making all your changes, save the file as a new tab delimited text file: File / Save As...oilheat2.txt. And a second copy as an Excel.xls file. You can then work with this file to produce various reports in Excel, such as this Chart:

Home Heating Oil - 16 Cities



Excel source file: oilgraph.xls