



**NB-IRDT**

New Brunswick Institute for  
Research, Data and Training

# Air Quality Data ELG07

Compiled by NB-IRDT Staff  
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## How to Obtain More Information

For more information about this Codebook or other services and data available from the New Brunswick Institute for Research, Data and Training (NB-IRDT), contact us in any of the following ways:

- visit our website at <https://www.nbirdt.ca/>
- email us at [nb-irdt@unb.ca](mailto:nb-irdt@unb.ca)
- call us at 506-447-3363 Monday to Friday, 8:30am to 4:30pm

## Table of Contents

How to Obtain More Information .....	2
About this Codebook .....	5
Overview .....	6
Sample Universe .....	6
Date Range .....	6
Data Source .....	6
How to Cite this Codebook .....	6
Acknowledgements .....	6
About this Product .....	7
Purpose of the Product .....	7
Definitions and Concepts .....	7
Content .....	7
General Methodology .....	7
Limitations .....	7
Comparison to Other Products/Versions .....	7
Using with Other Products .....	7
Record Layouts and Data Descriptions .....	8
Overview .....	8
Air Quality Data .....	8
STATION_ID .....	8
DATE_TIME .....	9
DATE .....	9
YEAR .....	9
STATION_NAME .....	9
LATITUDE .....	9
LONGITUDE .....	9
STATION_NAPS_ID .....	9
ORGANIZATION .....	9
CITY .....	9
SO2 .....	9
SO2_FLAG .....	10
O3 .....	10
O3_FLAG .....	10
NO2 .....	10
NO2_FLAG .....	10
NO .....	11
NO_FLAG .....	11
NOX .....	11
NOX_FLAG .....	11
PM_25 .....	12
PM_25_FLAG .....	12
PM_25_SOURCE .....	12
TRS .....	12

TRS_FLAG.....	12
CO.....	13
CO_FLAG.....	13
WIND_DIR.....	13
WIND_DIR_FLAG.....	13
WIND_SPEED.....	13
WIND_SPEED_FLAG.....	13
Document History.....	15

## About this Codebook

This data product is provided 'as is,' and NB-IRDT makes no warranty, either express or implied, including but not limited to warranties of merchantability and fitness for a particular purpose. In no event will NB-IRDT be liable for any direct, special, indirect, consequential or other damages, however caused.

Due to the operational nature of administrative data sets, there is potential for discrepancies between the names of variables and their corresponding definitions. In the case of such a discrepancy, the variable definition should be considered the most accurate representation.

## Overview

Overview of the database

## Sample Universe

Who/what is contained in the dataset (e.g., the Citizen Database contains people who have or had New Brunswick Medicare)

## Date Range

Date range of the database. If the range does not follow the calendar year, please list the exact dates (if possible). (format: yyyy-mm-dd)

## Data Source

Source where the data came from

## How to Cite this Codebook

New Brunswick Institute for Research, Data and Training. (2024). Air Quality Data ELG07 Codebook for years 2019-2021. Fredericton, NB: New Brunswick Institute for Research, Data and Training.

## Acknowledgements

The ELG07 Database is used with the permission of "New Brunswick Department of Environment and Local Government."

## About this Product

### Purpose of the Product

The purpose of the ELG07 Database Codebook is to provide information on the linkable New Brunswick Air Quality data held at the New Brunswick Institute for Research, Data and Training (NB-IRDT). This data is accessible to researchers for environmental and other areas of research.

### Definitions and Concepts

Any relevant definitions and concepts related to the dataset

### Content

Contents of the database including the number of fields and field names  
Please include a description of what each record represents

### General Methodology

If known

### Limitations

Any limitations of the database (e.g., may not contain all variables in the data source)

### Comparison to Other Products/Versions

If applicable

### Using with Other Products

If applicable

## Record Layouts and Data Descriptions

### Overview

#### Air Quality Data

#	Name	Label	Type
1	STATION_ID	Unique Station ID	Integer
2	DATE_TIME	Hourly Timestamp Atlantic Standard Time (AST)	Date
3	DATE	Date from DATE_TIME column	Date
4	YEAR	Year from DATE_TIME column	Integer
5	STATION_NAME	Station name	Text
6	LATITUDE	Station latitude	Decimal
7	LONGITUDE	Station longitude	Decimal
8	STATION_NAPS_ID	NAPS ID for station (if applicable)	Integer
9	ORGANIZATION	Organization that owns the station	Text
10	CITY	City where the station is located	Text
11	SO2	Sulfur dioxide	Decimal
12	SO2_FLAG	Flags or Errors in Data	Integer
13	O3	Ground-level ozone	Decimal
14	O3_FLAG	Flags or Errors in Data	Integer
15	NO2	Nitrogen dioxide	Decimal
16	NO2_FLAG	Flags or Errors in Data	Integer
17	NO	Nitrogen oxide	Decimal
18	NO_FLAG	Flags or Errors in Data	Integer
19	NOX	Nitrogen oxides	Decimal
20	NOX_FLAG	Flags or Errors in Data	Integer
21	PM_25	Particulate matter < 2.5 microns	Decimal
22	PM_25_FLAG	Flags or Errors in Data	Integer
23	PM_25_SOURCE	PM Monitoring technology	Text
24	TRS	Total reduced Sulphur Compounds	Decimal
25	TRS_FLAG	Flags or Errors in Data	Integer
26	CO	Carbon monoxide	Decimal
27	CO_FLAG	Flags or Errors in Data	Integer
28	WIND_DUR	Wind direction	Decimal
29	WIND_DUR_FLAG	Flags or Errors in Data	Integer
30	WIND_SPEED	Wind speed	Decimal
31	WIND_SPEED_FLAG	Flags or Errors in Data	Integer

#### STATION\_ID

Unique Station ID.



**DATE\_TIME**

Hourly Timestamp Atlantic Standard Time (AST).

**DATE**

Date from DATE\_TIME column.

**YEAR**

Year from DATE\_TIME column.

**STATION\_NAME**

Station name.

**LATITUDE**

Station latitude.

**LONGITUDE**

Station longitude.

**STATION\_NAPS\_ID**

NAPS ID for station (if applicable).

Code	Description - English	Description - French
40203	Forest Hills	
40207	West Side Station	
40302	Moncton	
40103	Fredericton	
41302	Bathurst – Rough Waters Drive	
40209	Castle Street – Saint John	
40104	Fredericton Needham	
41501	Edmundston	
40901	St. Andrews	
41601	Miramichi	

**ORGANIZATION**

Organization that owns the station.

**CITY**

City where the station is located.

**SO2**

Sulfur dioxide.

### SO2\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	

### O3

Ground-level ozone.

### O3\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	

### NO2

Nitrogen dioxide.

### NO2\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	

5	Calibration zero
6	Calibration Span
7	Out Calibration
8	Communication Failed
9	Calibration Status
27	Calibration Status Purge
85	Calibration Status – Data Ok

## NO

Nitrogen Oxide.

### NO\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	
27	Calibration Status Purge	
85	Calibration Status – Data Ok	

## NOX

Nitrogen oxides.

### NOX\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	

9	Calibration Status
27	Calibration Status Purge
85	Calibration Status – Data Ok

### PM\_25

Particulate Matter < 2.5 microns.

### PM\_25\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	

### PM\_25\_SOURCE

PM Monitoring Technology.

### TRS

Total Reduced Sulphur Compounds.

### TRS\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	

## CO

Carbon monoxide.

### CO\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	

## WIND\_DIR

Wind direction.

### WIND\_DIR\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
0	No Data	
1	Data Ok	
2	Scan Off	
3	Less Sample	
4	Invalid	
5	Calibration zero	
6	Calibration Span	
7	Out Calibration	
8	Communication Failed	
9	Calibration Status	
22	Heat Ln	
90	Wind Calm	

## WIND\_SPEED

Wind speed.

### WIND\_SPEED\_FLAG

Flags or Errors in Data.

Code	Description - English	Description - French
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0	No Data
1	Data Ok
2	Scan Off
3	Less Sample
4	Invalid
5	Calibration zero
6	Calibration Span
7	Out Calibration
8	Communication Failed
9	Calibration Status
22	Heat Ln
90	Wind Calm

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## Document History

Version	Author	Nature of Change	Date
1.0	NB-IRDT STAFF	Creation of Document	February 2024
Approved by		Approval Date	Review Date