**CANADIAN URBAN ENVIRONMENTAL HEALTH
RESEARCH CONSORTIUM**

DATA DICTIONARY

March 5, 2018

Contents

POSTAL CODE DATA

POSTAL CODES - annual DMTI single link postal code files, 1983 to 2016
Metadata file: CANUE Metadata Postal Codes.pdf
(YY = last two digits of specific year of data)

File name	Variable Description	Variable name
DMTI_SLI_YY.csv	6-digit postal code with no space between the FSA and LDU. (i.e. L1R2H2)	POSTALCODEYY
	2 letter alpha abbreviation (Canada Post) according to the first letter of the postal code (i.e. L1R2H2 = ON).	PROV_YY
	Community name	COMM_NAME_YY
	Municipality name	MUNICIPAL_YY
	Date when the postal code became active (YYYYMMDD format).	BIRTH_DATE_YY
	Date when a postal code was retired or no longer in use by Canada Post Corporation (YYYYMMDD format)	RET_DATE_YY
	Dominant Delivery Mode Type for Active Postal Code records only: CF = Call For; DR = Direct; GD = General Delivery, LB = Lock Box; LC = Letter Carrier; MR = Mobile Route; RR = Rural Route; SS = Suburban Service.	DOM_DELMDE_YY
	Total Points of Call – total number of points of call (apartments, businesses, houses and farms) served by the postal code for all delivery mode types for Active Postal Code records only.	TOTAL_POC_YY
	Points of Call for Apartments – the total number of apartments served by the postal code for all delivery mode types for Active Postal Code records only.	POC_APART_YY
	Points of Call for Businesses – the total number of businesses served by the postal code for all delivery mode types for Active Postal Code records only.	POC_BUS_YY
	Points of Call for Houses – the total number of houses served by the postal code for all delivery mode types for Active Postal Code records only.	POC_HOUSE_YY
	Points of Call for Farms – the total number of farms served by the postal code for all delivery mode types for Active Postal Code records only.	POC_FARM_YY
	Total number of Postal Code point records associated with each postal code.	PC_COUNT_YY
	Identifies the method used to geographically position the interpolated coordinate: 10 = Centroid of Building Footprint; 11 = Building/Unit Entrance (Main); 12 = Building Driveway; 20 = Centroid of Parcel; 21 = Inside Parcel; 22 = Along Parcel Front Line.	POSITION_YY
	Longitude of postal code (decimal degrees)	LONGITUDE_YY
	Latitude of postal code (decimal degrees)	LATITUDE_YY
	Flag indicates if a postal code covers multiple streets (1 = multiple, 0 = single).	MULTI_ST_YY
	Distance in meters to the nearest or closest postal code	NEAR_DIST_YY
	Interpolated longitude in decimal degrees of the nearest postal code.	NEAR_X_YY
	Interpolated latitude in decimal degrees of the nearest postal code.	NEAR_Y_YY
	Nearest 6-digit postal code data with no space (i.e. L1R2H2).	NEAR_PC_YY

AIR QUALITY DATA

NITROGEN DIOXIDE – Land use regression-based annual concentration estimate, 1984 to 2012 Metadata file: CANUE Metadata NO2 LUR.pdf		
File name	**Variable Description**	**Variable name**
NO2LUR_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Original LUR annual average concentration at postal code in parts per billion, circa 2006	NO2LUR06_A_01
	Annual average concentration at postal code in parts per billion for file year	NO2LURYY_A_01
	Census division identifier	NO2LURYY_A_02
	Census division name	NO2LURYY_A_03
	Maximum distance between postal code location and census division boundary in meters (0 = postal code is located within census division)	NO2LURYY_A_04

GROUND-LEVEL OZONE – annual modelled concentration estimate, 2002 to 2015 (O3CHG_A_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Metadata O3 CHG.pdf		
File name	**Variable Description**	**Variable name**
O3CHG_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Annual average concentration at postal code in parts per billion	O3CHGYY_01

FINE PARTICULATES (PM2.5) – 3-year annual average satellite-based concentration estimate, 2000 to 2012 (PM25DAL_A_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Metadata PM25 DAL.pdf		
File name	**Variable Description**	**Variable name**
PM25DAL_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	3-year annual average concentration at postal code in $\mu g/m^3$	PM25DALYY_01
	Mean of 3-year average concentration within 10km of postal code in $\mu g/m^3$	PM25DALYY_02

SULFUR DIOXIDE – 3-year annual average OMI satellite-based concentration estimate, 2007 to 2015 (SO2OMI_A_YY.csv files, where YY = last two digits of specific year of data) Metadata File: CANUE Metadata SO2 OMI.pdf		
File name	**Variable Description**	**Variable name**
SO2OMI_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	3-year annual average concentration at postal code in parts per billion	SO2OMIYY_01

GREEN/BLUE SPACE DATASETS

LANDSAT ANNUAL MEAN NDVI - annual mean normalized difference vegetation index files, 1984 to 2015 (GRLAN_AMN_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Metadata NDVI Landsat.pdf		
File name	**Variable Description**	**Variable name**
GRLAN_AMN_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Annual mean NDVI at postal code	GRLANYY_01
	Mean of annual mean NDVI within 100 m	GRLANYY_02
	Mean of annual mean NDVI within 250 m	GRLANYY_03
	Mean of annual mean NDVI within 500 m	GRLANYY_04
	Mean of annual mean NDVI within 1000 m	GRLANYY_05
	Maximum of annual mean NDVI within 100 m	GRLANYY_06
	Maximum of annual mean NDVI within 250 m	GRLANYY_07
	Maximum of annual mean NDVI within 500 m	GRLANYY_08
	Maximum of annual mean NDVI within 1000 m	GRLANYY_09

LANDSAT GROWING SEASON MEAN NDVI - growing season (May 1st - Aug 31st) mean normalized difference vegetation index, 1984 to 2015 (GRLAN_GMN_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Metadata NDVI Landsat.pdf		
File name	**Variable Description**	**Variable name**
GRLAN_GMN_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Growing season mean NDVI at postal code	GRLANYY_10
	Mean of growing season mean NDVI within 100 m	GRLANYY_11
	Mean of growing season mean NDVI within 250 m	GRLANYY_12
	Mean of growing season mean NDVI within 500 m	GRLANYY_13
	Mean of growing season mean NDVI within 1000 m	GRLANYY_14
	Maximum of growing season mean NDVI within 100 m	GRLANYY_15
	Maximum of growing season mean NDVI within 250 m	GRLANYY_16
	Maximum of growing season mean NDVI within 500 m	GRLANYY_17
	Maximum of growing season mean NDVI within 1000 m	GRLANYY_18

GREEN/BLUE SPACE DATASETS *(continued)*

LANDSAT ANNUAL MAXIMUM NDVI - annual maximum normalized difference vegetation index, 1984 to 2015
(GRLAN_GP_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI Landsat.pdf

File name	Variable Description	Variable name
GRLAN_GP_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Maximum annual NDVI at postal code	GRLANYY_19
	Mean of maximum annual NDVI within 100 m	GRLANYY_20
	Mean of maximum annual NDVI within 250 m	GRLANYY_21
	Mean of maximum annual NDVI within 500 m	GRLANYY_22
	Mean of maximum annual NDVI within 1000 m	GRLANYY_23
	Maximum of annual maximum NDVI within 100 m	GRLANYY_24
	Maximum of annual maximum NDVI within 250 m	GRLANYY_25
	Maximum of annual maximum NDVI within 500 m	GRLANYY_26
	Maximum of annual maximum NDVI within 1000 m	GRLANYY_27

MODIS ANNUAL MEAN NDVI - annual mean normalized difference vegetation index files, 2000 to 2015
(GRMOD_AMN_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI Modis.pdf

File name	Variable Description	Variable name
GRMOD_AMN_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Mean annual NDVI at postal code	GRMODYY_01
	Mean of annual mean NDVI within 500 m	GRMODYY_02
	Mean of annual mean NDVI within 1000 m	GRMODYY_03
	Maximum of annual mean NDVI within 500 m	GRMODYY_04
	Maximum of annual mean NDVI within 1000 m	GRMODYY_05

GREEN/BLUE SPACE DATASETS *(continued)*

MODIS ANNUAL MAXIMUM NDVI - annual maximum normalized difference vegetation index files, 2000 to 2005
(GRMOD_AMX_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI Modis.pdf

File name	Variable Description	Variable name
GRMOD_AMX_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Annual maximum NDVI at postal code	GRMODYY_06
	Mean of annual maximum NDVI within 500 m	GRMODYY_07
	Mean of annual maximum NDVI within 1000 m	GRMODYY_08
	Maximum of annual maximum NDIV within 500 m	GRMODYY_09
	Maximum of annual maximum NDIV within 1000 m	GRMODYY_10

MODIS GROWING SEASON MEAN NDVI - growing season (May 1st - Aug 31st) mean normalized difference vegetation index, 2000 to 2015; (GRMOD_GMN_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI Modis.pdf

File name	Variable Description	Variable name
GRMOD_GMN_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Growing season mean NDVI at postal code	GRMODYY_11
	Mean of growing season mean NDVI within 500 m	GRMODYY_12
	Mean of growing season mean NDVI within 1000 m	GRMODYY_13
	Maximum of growing season mean NDVI within 500 m	GRMODYY_14
	Maximum of growing season mean NDVI within 1000 m	GRMODYY_15

MODIS GROWING SEASON MAXIMUM NDVI - growing season (May 1st - Aug 31st) maximum normalized difference vegetation index, 1984 to 2015; (GRMOD_GMX_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI Modis.pdf

File name	Variable Description	Variable name
GRMOD_GMX_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Growing Season maximum NDVI at postal code	GRMODYY_16
	Mean of growing season maximum NDVI within 500 m	GRMODYY_17
	Mean of growing season maximum NDVI within 1000 m	GRMODYY_18
	Maximum of growing season maximum NDVI within 500 m	GRMODYY_19
	Maximum of growing season maximum NDVI within 1000 m	GRMODYY_20

GREEN/BLUE SPACE DATASETS *(continued)*

AVHRR ANNUAL and GROWING SEASON NDVI - annual mean and maximum, and growing season (May 1st to Aug 31st) maximum normalized difference vegetation index, 1985 to 2013
(GRAVH_A_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: CANUE Metadata NDVI AVHRR.pdf

File name	Variable Description	Variable name
GRAVH_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Annual maximum NDVI	GRAVHYY_01
	Annual average NDVI	GRAVHYY_02
	Growing season average NDVI	GRAVHYY_03

NEIGHBOURHOOD FACTOR DATASET

MATERIAL AND SOCIAL DEPRIVATION INDICES - indicators of material and social deprivation based on census information, 1991, 1996, 2001, 2006 and 2011
(INDMSD_A_91.csv; INDMSD_A_96.csv; INDMSD_A_01.csv; INDMSD_A_06.csv; and INDMSD_A_11.csv)
Metadata file: CANUE Metadata Deprivation Index.pdf

File name	Variable Description	Variable name
INDMSD_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Maximum distance between postal code location and dissemination area boundary in meters (0 = postal code is located within dissemination area)	MSDYY_DIS_DA
	Dissemination Area Population	MSDYY_DAPOP
	Census Subdivision code	MSDYY_CSD
	Province	MSDYY_PR
	Region: Atlantic, Quebec, Ontario, Prairies, British Columbia	MSDYY_REG
	Zone: Large CMA, Other CMA, Agglomeration, Rural	MSDYY_ZONE
	Census Metropolitan Area: Toronto, Montreal, Vancouver	MSDYY_CMA
	Deprivation index - material factor score	MSDYY_MFS
	Deprivation index - social factor score	MSDYY_SFS
	Material Factor Score Quintile within Province (1 = lowest, 5 = highest)	MSDYY_MQ5PR
	Social Factor Score Quintile within Province (1 = lowest, 5 = highest)	MSDYY_SQ5PR
	Material Factor Score Percentile within Province (1 = lowest, 100 = highest)	MSDYY_MPPR
	Social Factor Score Percentile within Province (1 = lowest, 100 = highest)	MSDYY_SPPR
	Material Factor Score Quintile within Region (1 = lowest, 5 = highest)	MSDYY_MQ5REG
	Social Factor Score Quintile within Region (1 = lowest, 5 = highest)	MSDYY_SQ5REG
	Material Factor Score Quintile within Zone (1 = lowest, 5 = highest)	MSDYY_MQ5ZN
	Social Factor Score Quintile within Zone (1 = lowest, 5 = highest)	MSDYY_SQ5ZN
	Material Factor Score Quintile within CMA (1 = lowest, 5 = highest)	MSDYY_MQ5CMA
	Social Factor Score Quintile within CMA (1 = lowest, 5 = highest)	MSDYY_SQ5CMA

NEIGHBOURHOOD FACTOR DATASETS *(continued)*

File name	Variable Description	Variable name
DMSP-OLS NIGHTTIME LIGHT - annual average nighttime brightness, 1992 to 2013 (LGTNLT_A_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Metadata Night Light.pdf		
LGTNLT_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Brightness at postal code	LGTNLTYY_01

NEIGHBOURHOOD FACTOR DATASETS *(continued)*

CANADIAN ACTIVE LIVING ENVIRONMENTS (Can-ALE) – geographic-based set of measures that represent the active living friendliness of Canadian communities, 2006 and 2016
(ALE_A_YY.csv files, where YY = last two digits of specific year of data)
Metadata file: [CANUE Metadata Canadian Active Living Environments.pdf](#)

File name	Variable Description	Variable name
ALE_A_06.csv	6-digit DMTI single link postal code	POSTALCODE06
	Unique identifier of the dissemination area (eight digits)	ALE06_01
	The number of ≥3-way intersections per square kilometre in the buffer around a dissemination area centroid	ALE06_02
	The number of dwellings per square kilometre in the buffer around a dissemination area centroid	ALE06_03
	Z-score of the intersection density measure	ALE06_04
	Z-score of the dwelling density measure	ALE06_05
	Sum of the z-score of the intersection density, dwelling density, and points of interest measures	ALE06_06
	Categorical value characterizing the favourability of the ALE on a scale from 1 (very low) to 5 (very high)	ALE06_07
ALE_A_16.csv	6-digit DMTI single link postal code	POSTALCODE16
	Unique identifier of the dissemination area (eight digits)	ALE16_01
	The number of ≥3-way intersections per square kilometre in the buffer around a dissemination area centroid	ALE16_02
	The number of dwellings per square kilometre in the buffer around a dissemination area centroid	ALE16_03
	The number of points of interest in the buffer around a dissemination area centroid	ALE16_04
	Z-score of the intersection density measure	ALE16_05
	Z-score of the dwelling density measure	ALE16_06
	Z-score of the points of interest measure	ALE16_07
	Sum of the z-score of the intersection density, dwelling density, and points of interest measure	ALE16_08
	Categorical value characterizing the favourability of the ALE on a scale from 1 (very low) to 5 (very high)	ALE16_09
	The number of public transit stops or stations in the buffer around a dissemination area centroid	ALE16_10
	Z-score of the transit measure	ALE16_11
	Sum of the z-score of the intersection density, dwelling density, points of interest, and transit measures	ALE16_12
	Categorical value characterizing the favourability of the ALE in CMAs on a scale from 1 (very low) to 5 (very high)	ALE16_13

WEATHER AND CLIMATE DATASETS

WEATHER INDICATORS – annual metrics based on interpolated station data, 1985 to 2015 (WTHNRC_A_YY.csv files, where YY = last two digits of specific year of data) Metadata file: CANUE Weather NRCAN.pdf		
File name	**Variable Description**	**Variable name**
WTHNRC_A_YY.csv	6-digit DMTI single link postal code	POSTALCODEYY
	Annual highest temperature (Celsius)	WTHNRCYY_01
	Annual lowest temperature (Celsius)	WTHNRCYY_02
	Annual average temperature (Celsius)	WTHNRCYY_03
	Annual average of daily maximum temperature (Celsius)	WTHNRCYY_04
	Annual average of daily minimum temperature (Celsius)	WTHNRCYY_05
	Annual average of difference between maximum and minimum temperatures (Celsius)	WTHNRCYY_06
	Annual number of days with rain (precipitation on all days with minimum temperature > = 0)	WTHNRCYY_07
	Annual total precipitation as rain (precipitation on all days with minimum temperature > = 0) (millimeters)	WTHNRCYY_08
	Annual number of rain events (consecutive days with rain, including single day events)	WTHNRCYY_09
	Annual average amount of rain per event (millimeters)	WTHNRCYY_10
	Annual average length of rain events (days)	WTHNRCYY_11
	Annual number of days with snow (precipitation on all days with minimum temperature < 0)	WTHNRCYY_12
	Annual total precipitation as snow (precipitation on all days with minimum temperature < 0) (millimeters)	WTHNRCYY_13
	Annual number of snow events (consecutive days with snow, including single day events)	WTHNRCYY_14
	Annual average amount of snow per event (millimeters)	WTHNRCYY_15
	Annual average length of snow events (days)	WTHNRCYY_16
	Annual number of heat event starts based on maximum temperature (where there are three or more consecutive days with maximum daily temperature > 95th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_17

WEATHER AND CLIMATE DATASETS *(continued)*

File name	Variable Description	Variable name
WTHNRC_A_YY.csv *(continued)*	Annual number of days in heat events based on maximum temperature (where there are three or more consecutive days with maximum daily temperature > 95th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_18
	Annual average length of heat events based on maximum temperature (where there are three or more consecutive days with maximum daily temperature > 95th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_19
	Annual number of cool event starts based on maximum temperature (where there are three or more consecutive days with maximum daily temperature <5th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_20
	Annual number of days in cool events based on maximum temperature (where there are three or more consecutive days with maximum daily temperature <5th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_21
	Annual average length of cool events based on maximum temperature (where there are three or more consecutive days with maximum daily temperature <5th percentile of daily normal maximum temperatures; normal distribution based on daily maximum temperatures 1985-2015)	WTHNRCYY_22
	Annual number of heat event starts based on minimum temperature (where there are three or more consecutive days with minimum daily temperature > 95th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_23
	Annual number of days in heat events based on minimum temperature (where there are three or more consecutive days with minimum daily temperature > 95th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_24
	Annual average length of heat events based on minimum temperature (where there are three or more consecutive days with minimum daily temperature > 95th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_25
	Annual number of cool event starts based on minimum temperature (where there are three or more consecutive days with minimum daily temperature <5th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_26
	Annual number of days in cool events based on minimum temperature (where there are three or more consecutive days with minimum daily temperature <5th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_27

WEATHER AND CLIMATE DATASETS *(continued)*

File name	Variable Description	Variable name
WTHNRC_A_YY.csv *(continued)*	Annual average length of cool events based on minimum temperature (where there are three or more consecutive days with minimum daily temperature <5th percentile of daily normal minimum temperatures; normal distribution based on daily minimum temperatures 1985-2015)	WTHNRCYY_28
	Annual number of heat event starts based on average temperature (where there are three or more consecutive days with average daily temperature > 95th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_29
	Annual number of days in heat events based on average temperature (where there are three or more consecutive days with average daily temperature > 95th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_30
	Annual average length of heat events based on average temperature (where there are three or more consecutive days with average daily temperature > 95th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_31
	Annual number of cool event starts based on average temperature (where there are three or more consecutive days with average daily temperature <5th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_32
	Annual number of days in cool events based on average temperature (where there are three or more consecutive days with average daily temperature <5th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_33
	Annual average length of cool events based on average temperature (where there are three or more consecutive days with average daily temperature <5th percentile of daily normal average temperatures; normal distribution based on daily average temperatures 1985-2015)	WTHNRCYY_34
	Annual number of frost free days (min temp > 0) (days)	WTHNRCYY_35