Variable	Type	Description
id_local	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_distrito_local	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_distrito_local	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_barrio_local	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_barrio_local	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_tipo_acceso_local	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_situacion_local	float64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_situacion_local	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
clase_vial_acceso	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_vial_acceso	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
nom_acceso	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
num_acceso	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
cal_acceso	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_agrupacion	float64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
nombre_agrupacion	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_tipo_agrup	float64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_tipo_agrup	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
rotulo	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_seccion	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_seccion	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_division	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_division	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
id_epigrafe	int64	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
desc_epigrafe	object	Description in: https://datos.madrid.es/FWProjects/egob/Catalogo/Economia/Ficheros/Estructura_DS_FicheroCLA.pdf
conc	object	Support variable that identifies one stores clearly: concatenates 'rotulo'+'desc_vial_acceso'.
desc_sit_loc_modif_19	object	Support variable with four categorical values: Cerrado, Abierto, Uso vivienda, En obras. Detail: Cerrado: desc_epigrafe == 'LOCAL SIN ACTIVIDAD' & desc_situacion_local == 'Baja' | 'Baja PC Asociado | 'Baja reunificacion'| 'Cerrado'. Abierto: desc_situacion_local' == 'Abierto. Uso vivienda: desc_situacion_local == 'Abierto'. En obras: desc_situacion_local == 'En obras'. Year 2019
desc_sit_loc_modif_18	object	Support variable with four categorical values: Cerrado, Abierto, Uso vivienda, En obras. Detail: Cerrado: desc_epigrafe == 'LOCAL SIN ACTIVIDAD' & desc_situacion_local == 'Baja' | 'Baja PC Asociado | 'Baja reunificacion'| 'Cerrado'. Abierto: desc_situacion_local' == 'Abierto. Uso vivienda: desc_situacion_local == 'Abierto'. En obras: desc_situacion_local == 'En obras'. Year 2018
desc_sit_loc_modif_17	object	Support variable with four categorical values: Cerrado, Abierto, Uso vivienda, En obras. Detail: Cerrado: desc_epigrafe == 'LOCAL SIN ACTIVIDAD' & desc_situacion_local == 'Baja' | 'Baja PC Asociado | 'Baja reunificacion'| 'Cerrado'. Abierto: desc_situacion_local' == 'Abierto. Uso vivienda: desc_situacion_local == 'Abierto'. En obras: desc_situacion_local == 'En obras'. Year 2017
desc_sit_loc_modif_16	object	Support variable with four categorical values: Cerrado, Abierto, Uso vivienda, En obras. Detail: Cerrado: desc_epigrafe == 'LOCAL SIN ACTIVIDAD' & desc_situacion_local == 'Baja' | 'Baja PC Asociado | 'Baja reunificacion'| 'Cerrado'. Abierto: desc_situacion_local' == 'Abierto. Uso vivienda: desc_situacion_local == 'Abierto'. En obras: desc_situacion_local == 'En obras'. Year 2016
desc_sit_loc_modif_15	object	Support variable with four categorical values: Cerrado, Abierto, Uso vivienda, En obras. Detail: Cerrado: desc_epigrafe == 'LOCAL SIN ACTIVIDAD' & desc_situacion_local == 'Baja' | 'Baja PC Asociado | 'Baja reunificacion'| 'Cerrado'. Abierto: desc_situacion_local' == 'Abierto. Uso vivienda: desc_situacion_local == 'Abierto'. En obras: desc_situacion_local == 'En obras'. Year 2015
cerrado_19	int64	1' if the local has closed in 2019 ('cerrado_19'). Detail: ['cerrado_19'] = np.where(cond1 & cond2, 1 ,0) ; cond1 = ((df_.desc_sit_loc_modif_19 == 'Cerrado') | (df_.desc_sit_loc_modif_19 == 'Uso vivienda')) cond2 = ((df_.desc_sit_loc_modif_18 != 'Cerrado') | df.desc_sit_loc_modif_18.isnull())
abierto_19	int64	1' if the store opened in 2019. Detail: df_['abierto_19'] = np.where(cond3, 1 ,0); cond3 = ((df_.desc_sit_loc_modif_19. notnull()) & (df_.desc_sit_loc_modif_18.isnull()))
cerrado_18	int64	1' if the local has closed in 2018 ('cerrado_18'). Detail: ['cerrado_18'] = np.where(cond1 & cond2, 1 ,0) ; cond1 = ((df_.desc_sit_loc_modif_18 == 'Cerrado') | (df_.desc_sit_loc_modif_18 == 'Uso vivienda')) cond2 = ((df_.desc_sit_loc_modif_17 != 'Cerrado') | df.desc_sit_loc_modif_17.isnull())
abierto_18	int64	1' if the store opened in 2018. Detail: df_['abierto_19'] = np.where(cond3, 1 ,0); cond3 = ((df_.desc_sit_loc_modif_18. notnull()) & (df_.desc_sit_loc_modif_17.isnull()))
cerrado_17	int64	1' if the local has closed in 2017 ('cerrado_17'). Detail: ['cerrado_17'] = np.where(cond1 & cond2, 1 ,0) ; cond1 = ((df_.desc_sit_loc_modif_17 == 'Cerrado') | (df_.desc_sit_loc_modif_17 == 'Uso vivienda')) cond2 = ((df_.desc_sit_loc_modif_16 != 'Cerrado') | df.desc_sit_loc_modif_16.isnull())
abierto_17	int64	1' if the store opened in 2017. Detail: df_['abierto_17'] = np.where(cond3, 1 ,0); cond3 = ((df_.desc_sit_loc_modif_17. notnull()) & (df_.desc_sit_loc_modif_16.isnull()))
cerrado_16	int64	1' if the local has closed in 2016 ('cerrado_16'). Detail: ['cerrado_16'] = np.where(cond1 & cond2, 1 ,0) ; cond1 = ((df_.desc_sit_loc_modif_16 == 'Cerrado') | (df_.desc_sit_loc_modif_16 == 'Uso vivienda')) cond2 = ((df_.desc_sit_loc_modif_15 != 'Cerrado') | df.desc_sit_loc_modif_15.isnull())
abierto_16	int64	1' if the store opened in 2016. Detail: df_['abierto_16'] = np.where(cond3, 1 ,0); cond3 = ((df_.desc_sit_loc_modif_16. notnull()) & (df_.desc_sit_loc_modif_15.isnull()))
target	int64	Dependent or target variable. It is '1' if the store has been closed in the last 3 years. Detail: ['target'] = np.where(cond, 1,0); cond = ((df_.cerrado_19 == 1) | (df_.cerrado_18 == 1) | (df_.cerrado_17 == 1))
desc_act_norm	object	Normalized type of activity: count of 'desc_epigrafe' (activity) < than percentile .75 are grouped in a common activity == 'OTRAS ACTIVIDADES'.

id_act_norm	int64	Normalized id of activity: count of 'id_epigrafe' (activity) < than percentile .75 are grouped in a common id_act_norm == 999999
ab_17_19	int64	1' if the store opened between 2017 and 2019. Detail: ['ab_17_19'] = ['abierto_19'] + ['abierto_18'] + [,'abierto_17']
loc_dist_act	int64	Number of stores of the same activity/district. Detail: pd.DataFrame(df.groupby(['id_distrito_local','id_epigrafe']).count(). id_local)
ab_dist_act_17_19	float64	Number of stores of the same activity and district opened between 2017 and 2019. Detail: pd.DataFrame(df[df['ab_17_19'] ==1].groupby(['id_distrito_local','id_epigrafe']).count().ab_17_19.astype(np.int64))
total_loc_act	int64	Number total stores of the same activity. Detail: pd.DataFrame(df.groupby(['id_epigrafe']).count().id_local)
total_ab_act_17_19	float64	Number of stores of the same activity opened between 2017 and 2019ab_act_17_19 = pd.DataFrame(df[df['ab_17_19'] ==1]. groupby(['id_epigrafe']).count().ab_17_19
loc_dist	int64	Total number of stores per district. Detail: pd.DataFrame(df.groupby(['id_distrito_local']).count().id_local)
ab_dist_17_19	int64	Total stores opened per district between 2017-2019. Detail: pd.DataFrame(df[df['ab_17_19'] ==1].groupby (['id_distrito_local']).count().ab_17_19)
loc_na_dist	int64	Total stores witout activity per district. Detail: pd.DataFrame(df[df['id_epigrafe']== 0].groupby('id_distrito_local').count(). desc_sit_loc_modif_19)
ab_dist_act_17_19_rate	float64	Rate of stores opened of the same activity and district between 2017 and 2019 vs total. Detail: (['ab_dist_act_17_19']/ ['loc_dist_act'])*100
total_ab_act_17_19_rate	float64	Rate of stores opened of the same activity between 2017 and 2019 vs total. Detail: (['total_ab_act_17_19']/['total_loc_act']) *100
total_ab_dist_17_19_rate	float64	Rate of stores opened in the same district between 2017 and 2019 vs total. Detail: (['ab_dist_17_19']/['loc_dist'])*100
total_na_dist_rate	float64	Rate of stores without activity per district vs total. Detail: [(['loc_na_dist']/['loc_dist'])*100
loc_barrio_act	int64	Number of stores of the same activity/neighbourhood. Detail: pd.DataFrame(df.groupby(['id_barrio_local','id_epigrafe']). count().id_local)
ab_barrio_act_17_19	float64	Number of stores of the same activity and neighboourhood opened between 2017 and 2019. Detail: ab_barrio_act_17_19 = pd.DataFrame(df[df['ab_17_19'] ==1].groupby(['id_barrio_local','id_epigrafe']).count().ab_17_19)
loc_barrio	int64	Total number of stores per neighbourhood. Detail: pd.DataFrame(df.groupby(['id_barrio_local']).count().id_local)
ab_barrio_17_19	int64	Total stores opened per neighbourhood between 2017-2019. Detail: pd.DataFrame(df[df['ab_17_19'] ==1].groupby (['id_barrio_local']).count().ab_17_19)
loc_na_barrio	int64	Total stores witout activity per neighbourhood. Detail: pd.DataFrame(df[df['id_epigrafe']== 0].groupby('id_barrio_local'). count().desc_sit_loc_modif_19)
ab_barrio_act_17_19_rate	float64	Rate of stores opened of the same activity and neighbourhood between 2017 and 2019 vs total. Detail: (['ab_barrio_act_17_19']/['loc_barrio_act'])*100
total_ab_barr_17_19_rate	float64	Rate of stores opened in the same neighbourhood between 2017 and 2019 vs total. Detail: (['ab_barrio_17_19']/ ['loc_barrio'])*100
total_na_barr_rate	float64	Rate of stores without activity per neighbourhood vs total. Detail: (['loc_na_barrio']/['loc_barrio'])*100
num_act	int64	Number of diferent activities ('desc_epigrafe') licenced for a single local
coord_x_final	float64	Unifies single stores and stores in collectives UTM coord_x
coord_y_final	float64	Unifies single stores and stores in collectives UTM coord_y
lat	float64	Latitude of the store
lon	float64	Longitude of the store
Población	int64	Population per district (units). End 2018 (Source: Madrid City Council)
Hombre	int64	Men population per district (units). End 2018 (Source: Madrid City Council)
Mujeres	int64	Women population per district (units). End 2018 (Source: Madrid City Council)
Densidad (Habitantes / Ha.)	float64	Population/area (hectarea) per district. End 2018 (Source: Madrid City Council)
Edad promedio	float64	Average age per district. End 2018 (Source: Madrid City Council)
Edad mediana	float64	Median age per district. End 2018 (Source: Madrid City Council)
Renta media/persona (euros)	int64	Average income/person/district (euros). End 2016 (from Expansion. See TFM references)
Total Hogares	int64	Total homes per district (units). End 2018. (Source: Madrid City Council)
Españoles	int64	Spaniards homes per district (units). End 2018. (Source: Madrid City Council)
Extranjeros	int64	Foreigners homes per district (units). End 2018 (Source: Madrid City Council)
Mixtos	int64	Mixed homes per district (units). End 2018. (Source: Madrid City Council)
España fuera barrio dia laboral	int64	Spaniards floating traffic out of district from Monday to Friday (units). Week 16-22 april 2018 (Private source: Kinneo)
Extranjero fuera barrio dia laboral	int64	Foreigners floating traffic from Monday to Friday (units). Week 16-22 april 2018 (Private source: Kinneo)
Total fuera barrio dia laboral	int64	Total out of district floating traffic from Monday to Friday (units) . Week 16-22 april 2018 (Private source: Kinneo)
España fuera barrio fin semana	int64	Spaniards from out of distrinct floating traffic from Saturday to Sunday (units). Week 16-22 april 2018 (Private source: Kinneo)
Extranjero fuera barrio fin semana	int64	Foreigners floating traffic from Saturday to Sunday (units). Week 16-22 april 2018 (Private source: Kinneo)
Total fuera barrio fin semana	int64	Total out of district floating traffic from Saturday to Sunday(units). Week 16-22 april 2018 (Private source: Kinneo)
Total barrio dia laboral	int64	Residents floating traffic from Monday to Friday (units). Week 16-22 april 2018 (Private source: Kinneo)
Total barrio fin semana	int64	Residents floating traffic from Saturday to Sunday (units). Week 16-22 april 2018 (Private source: Kinneo)
Total trabajo dia laboral	int64	Working population (no residents) floating traffic from Monday to Friday (units). Week 16-22 april 2018 (Private source: Kinneo)
Total trabajo fin semana	int64	Working population (no residents) floating traffic from Saturday to Sunday (units). Week 16-22 april 2018 (Private source: Kinneo)
total_TF_week	int64	Total residents and out of the district floating traffic in a week (units). Week 16-22 april 2018 (Private source: Kinneo)
ratio_t_total	float64	Working population vs total traffic ratio in a week (percentage). Week 16-22 april 2018 (Private source: Kinneo)
ratio_fb_total	float64	Out of district vs total traffic ratio in a week (percentage). Week 16-22 april 2018 (Private source: Kinneo)
ratio_b_total	float64	Residents vs total traffic ratio in a week (percentage). Week 16-22 april 2018 (Private source: Kinneo)

dist_type	int64	Type of district (Commercial, Residential or mixed): Detail: if ratio out of district/week > percentile 75 -> commercial (1), elif ratio district/week > percentile 75 -> residential (2), else mixed (3)
points_in_radius	int64	Number of stores of the same activity in 500 m