## Brazil school dataset description

## bra\_school\_data\_15062023\_.csv

An excerpt from a <u>Brazilian data panel</u> that consolidates various pieces of information about connectivity in Brazilian schools. The data sources used include the School Census, Broadband Program in Schools (PBLE), Connectivity in Rural Schools, Connected Education Meter, Electronic Government - Citizen Service (Gesac), Connected Northeast, and <u>MegaEdu</u>. The data is complemented with infrastructure proximity, cell tower visibility analysis, and population count around schools conducted by the ITU.

The panel considers active public schools of municipal, state, and federal dependencies, according to the School Census. Schools with internet access are those declared in the School Census or by another governmental source.

Parameter	Definition
school_id	school's unique identifier
state_code	code for level 1 administrative division in brazil
municipality_code	code for level 2 administrative division in brazil
name	school name
internet_availabilit	availability of an internet connection based on the available data sources
У	
census_internet_a vailability	availability of an internet connection according to the school census
electricity_availabil	availability of electricity supply based on the available data sources
ity	
lat	geographic latitude
lon	geographic longitude
4G	availability of 4g coverage
location	geographic location in point(lon, lat) format
school_count_at_l	total number of schools that share the same location as this school, based
ocation	on this dataset
date	date of last megaedu fiber estimation update
megaedu_fiber_dis	distance to the closest fiber according to megaedu data
t_km	
megaedu_classifica	school classification based on proximity to fiber location, according to
tion	megaedu data, in km
oo_at_least_50_m	distance to the closest ookla measurement tile centroid with a value of at
bps_dist_km	least 50 mbps of average download speed, in km
transport_network	distance to the closest transport network node, in km
_dist_km	
nbir_at_least_50_	distance to the closest nic.br measurement (march 2023 dataset from
mbps_dist_km	project connect website) with a value of at least 50 mbps of average download speed

min_combined_dis	minimum value out of the following columns:
t_km	'megaedu_fiber_dist_km','oo_more_than_50_mbps_dist_km_0','transport_n
	etwork_dist_km_0', 'nbir_more_than_50_mbps_dist_km_0'
cellular	distance to the closest cellular site, in km
site_dist_km	
is_visible	indicator of whether a tower is visible from school location (true) or not (false)
tower_1	the first visible tower
tower_1_lat	the latitude of the first visible tower
tower_1_lon	the longitude of the first visible tower
tower_1_antenna_	distance to the first visible tower
dist	
tower_1_azimuth_	azimuth to the first visible tower
angle	
tower_1_los_geom	line of sight geometry from the school to the first visible tower
tower_2	the second visible tower
tower_2_lat	the latitude of the second visible tower
tower_2_lon	the longitude of the second visible tower
tower_2_antenna_	distance to the second visible tower
dist	
tower_2_azimuth_	azimuth to the second visible tower
angle	
tower_2_los_geom	line of sight geometry from the school to the second visible tower
tower_3	the third visible tower
tower_3_lat	the latitude of the third visible tower
tower_3_lon	the longitude of the third visible tower
tower_3_antenna_	distance to the third visible tower
dist	
tower_3_azimuth_	azimuth to the third visible tower
angle	
tower_3_los_geom	line of sight geometry from the school to the third visible tower
pop_3km	population within a 3 km radius around this school.