CODEBOOK: “Playing Politics with Environmental Protection: The Political Economy of Designating Protected Areas in Brazil”

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** Datasets **

a. data_main.csv - dataset at the grid cell level.

b. data_muniborder.csv- dataset at the municipality level (electoral variables).

c. data_muniextractive.csv - dataset at the municipality level (economic extraction variables).

d. protect_ts.csv - dataset with protected areas by type (for Figure A4).

e. coalitions.csv - dataset with shifts in coalition alignments (for Figure A5)

a. data_main.csv

LABEL	DESCRIPTION	SOURCE
codigo	Municipal code for municipality	IBGE
year	Year of observation	N/A
ID	Unique grid cell identifier	N/A
nb	Code for neighboring municipality	IBGE
nb_d	Distance to nearest grid cell in neighboring municipality (in meters)	N/A
x	Longitude for grid cell centroid	N/A
y	Latitude for grid cell centroid	N/A
state_yr	Identifier for state-year fixed effects	N/A
br230_distance_1993	Minimum distance to Transamazonica roadway (in kilometers)	Walker, Reis, and Caldas (2011)
main_rds_dist	Minimum distance to any of the Amazon's five main roadways (in kilometers)	Walker, Reis, and Caldas (2011)
rds_dist	Minimum distance to any federal road (in kilometers)	Walker, Reis, and Caldas (2011)
acc_mean	Mean level of soil accessibility (z-score)	FAO-GAEZ
altg_mean	Mean altitude (in meters)	GDEM-NASA
climate_aggr_lv	Mean level of climate aggressiveness (z-score)	IBGE
elf	Ethnolinguistic fractionalization index	Weidmann, Rød, and Cederman (2010)
eva_mean	Annual mean of evapotranspiration in 1960-1991 (in millimeters)	FAO-GAEZ
nut_mean	Mean level of soil nutrients (z-score)	FAO-GAEZ
pop95d_avg	Mean population density in 1995	NASA-CIESIN
pop95c_avg	Mean population count in 1995	NASA-CIESIN
rain_mean	Annual mean of rainfall in 1960-1991 (in millimeters)	FAO-GAEZ
slp_index	Mean level of terrain slope (z-score)	FAO-GAEZ
cci_mean	Mean agro-climatic suitability for irrigated cacao in 1960-1991 (kilograms per hectare)	FAO-GAEZ
ccr_mean	Mean agro-climatic suitability for rain-fed cacao in 1960-1991 (kilograms per hectare)	FAO-GAEZ
cfi_mean	Mean agro-climatic suitability for irrigated coffee in 1960-1991 (kilograms per hectare)	FAO-GAEZ
cfr_mean	Mean agro-climatic suitability for rain-fed coffee in 1960-1991 (kilograms per hectare)	FAO-GAEZ
mzi_mean	Mean agro-climatic suitability for irrigated maize in 1960-1991 (kilograms per hectare)	FAO-GAEZ
mzr_mean	Mean agro-climatic suitability for rain-fed maize in 1960-1991 (kilograms per hectare)	FAO-GAEZ
pgi_mean	Mean agro-climatic suitability for irrigated pasture grasses in 1960-1991 (kilograms per hectare)	FAO-GAEZ
pgr_mean	Mean agro-climatic suitability for rain-fed pasture grasses in 1960-1991 (kilograms per hectare)	FAO-GAEZ
pli_mean	Mean agro-climatic suitability for irrigated pasture legumes in 1960-1991 (kilograms per hectare)	FAO-GAEZ
plr_mean	Mean agro-climatic suitability for rain-fed pasture legumes in 1960-1991 (kilograms per hectare)	FAO-GAEZ
rci_mean	Mean agro-climatic suitability for irrigated rice in 1960-1991 (kilograms per hectare)	FAO-GAEZ
rcr_mean	Mean agro-climatic suitability for rain-fed rice in 1960-1991 (kilograms per hectare)	FAO-GAEZ
sbi_mean	Mean agro-climatic suitability for irrigated soybean in 1960-1991 (kilograms per hectare)	FAO-GAEZ
sbr_mean	Mean agro-climatic suitability for rain-fed soybean in 1960-1991 (kilograms per hectare)	FAO-GAEZ
sgi_mean	Mean agro-climatic suitability for irrigated sugar in 1960-1991 (kilograms per hectare)	FAO-GAEZ

sgr_mean	Mean agro-climatic suitability for rain-fed sugar in 1960-1991 (kilograms per hectare)	FAO-GAEZ
temp_mean	Annual mean of temperature (in Celsius)	FAO-GAEZ
mml_mean	Mean number of threatened mammal species	Jenkins et al. (2015)
amp_mean	Mean number of threatened amphibian species	Jenkins et al. (2015)
brd_mean	Mean number of threatened bird species	Jenkins et al. (2015)
HubDist	Minimum distance to urban areas in 1995	NASA-CIESIN
urb_extent	Indicator if grid cell is in an urban area	NASA-CIESIN
vegetation_area	Proportion of a grid cell covered by vegetation	IBGE
water_area	Proportion of a grid cell covered by water bodies	IBGE
wrk_mean	Mean level of soil workability (z-score)	FAO-GAEZ
embargoed.area	Proportion of grid cell under a federal environmental embargo	IBAMA
federal	Proportion of grid cell covered by federal protected area	UNEP-WCMC (2015)
federal_pre97	Proportion of grid cell covered by federal protected area before 1997	UNEP-WCMC (2015)
state	Proportion of grid cell covered by state protected area	UNEP-WCMC (2015)
state_pre97	Proportion of grid cell covered by state protected area before 1997	UNEP-WCMC (2015)
indigen	Proportion of grid cell covered by indigenous land	UNEP-WCMC (2015)
indigen_pre97	Proportion of grid cell covered by indigenous land before 1997	UNEP-WCMC (2015)
deforested	Proportion of grid cell deforested	IBGE
pastures	Mean agro-climatic suitability for all pastures in 1960-1991 (kilograms per hectare)	FAO-GAEZ
soybeans	Mean agro-climatic suitability for all soybeans in 1960-1991 (kilograms per hectare)	FAO-GAEZ
deforested_muni_pr	Proportion of municipality deforested	IBGE
deforested_muni_ca	Indicator if municipality is a critical area of deforestation	IBGE/PRODES
p_coal	Indicator if mayor formed part of president's coalition	Slough, Urpelainen, and Yang (2017)
p_align	Indicator if mayor is in president's party	Slough, Urpelainen, and Yang (2017)
s_coal	Indicator if mayor formed part of state governor's coalition	Slough, Urpelainen, and Yang (2017)
s_align	Indicator if mayor is in state governor's party	Slough, Urpelainen, and Yang (2017)
g_coal	Indicator if governor is in president's coalition	Slough, Urpelainen, and Yang (2017)
pres_vote	Vote share of incumbent president for municipality	Superior Electoral Tribunal (TSE)
pres_vote_pre	Vote share of incumbent president for municipality for previous electoral cycle	Superior Electoral Tribunal (TSE)
pres_marg	Margin of victory or defeat for presidential candidate in municipality	Superior Electoral Tribunal (TSE)
pres_marg_pre	Margin of victory or defeat for presidential candidate in municipality for previous electoral cycle	Superior Electoral Tribunal (TSE)
party_match	Indicator if municipality forms part of treatment-control pair (for party alignment)	N/A
coal_match	Indicator if municipality forms part of treatment-control pair (for coalition alignment)	N/A
state_party_match	Indicator if municipality forms part of treatment-control pair (for state party alignment)	N/A
state_coal_match	Indicator if municipality forms part of treatment-control pair (for state coalition alignment)	N/A
prgo_party_match	Indicator if state forms part of treatment-control pair (for president-governor party alignment)	N/A
prgo_coal_match	Indicator if state forms part of treatment-control pair (for president-governor coalition alignment)	N/A
m_pair	Identifier for municipal border segment	IBGE
pres_*	Indicator if incumbent president vote share was in * decile (10, 20, etc.)	Superior Electoral Tribunal (TSE)

ideo_imp	Municipal ideological score for years of mayoral elections [-1, 1]	Power and Rodrigues-Silveira (2019)
ideo_imp_94	Municipal ideological score for 1994 [-1, 1]	Power and Rodrigues-Silveira (2019)

b. data_muniborder.csv

LABEL	DESCRIPTION	SOURCE
year	Year of observation	NA
codigo	Municipal code for municipality	IBGE
m_pair	Identifier for municipal border segment	IBGE
state_yr	Identifier for state-year fixed effects	N/A
federal	Indicator for any part of municipality covered by any federal protected area	UNEP-WCMC (2015)
federal_pre97	Indicator for any part of municipality covered by any federal protected area before 1997	UNEP-WCMC (2015)
federal_prop	Proportion of municipality covered by any federal protected area	UNEP-WCMC (2015)
federal_prop_pre97	Proportion of municipality covered by any federal protected area before 1997	UNEP-WCMC (2015)
p_coal	Indicator if mayor formed part of president's coalition	Slough, Urpelainen, and Yang (2017)
coal_match	Indicator if municipality forms part of treatment-control pair	N/A
pres_vote	Vote share of incumbent president for municipality	Superior Electoral Tribunal (TSE)
pres_marg	Margin of victory or defeat for presidential candidate in municipality	Superior Electoral Tribunal (TSE)
mayor_vote	Vote share of incumbent mayor for municipality	Superior Electoral Tribunal (TSE)

c. data_muniextractive.csv

LABEL	DESCRIPTION	SOURCE
year	Year of observation	NA
codigo	Municipal code for municipality	IBGE
soybeantn	Annual production of soybeans in a municipality (in metric tons)	IGBE
familiesn	Annual number of peasant families who received land to cultivate	Ministry of Agricultural Development
post2001	Indicator for years following 200	N/A
protected_prop	Proportion of municipality covered by any protected area in a municipality	UNEP-WCMC (2015)
minleases_den	Annual number of mining leases in a municipality	Mining National Agency
peasantf	Annual number of peasant farmsteads that received land to cultivate in a municipality	Ministry of Agricultural Development
state	Code for state	IBGE
state_yr	Identifier for state-year fixed effects	N/A

d. protect_ts.csv

LABEL	DESCRIPTION	SOURCE
year	Year of observation	N/A
fed	Total protected federal areas in the Legal Amazon (in squared kilometers)	UNEP-WCMC (2015)
fed.new	Additional new protected federal areas designated in observation year (in squared kilometers)	UNEP-WCMC (2015)
st	Total protected state areas in the Legal Amazon (in squared kilometers)	UNEP-WCMC (2015)
st.new	Additional new protected state areas designated in observation year (in squared kilometers)	UNEP-WCMC (2015)
ind	Total recognized Indigenous Lands in the Legal Amazon (in squared kilometers)	UNEP-WCMC (2015)
ind.new	Additional new Indigenous Lands designated in observation year (in squared kilometers)	UNEP-WCMC (2015)
fed97	Federal protected areas designated before 1997 (in squared kilometers)	UNEP-WCMC (2015)
st97	State rotected areas designated before 1997 (in squared kilometers)	UNEP-WCMC (2015)
ind97	Indigenous Lands designated before 1997 (in squared kilometers)	UNEP-WCMC (2015)

d. coalitions.csv

LABEL	DESCRIPTION	SOURCE
codigo	Municipal code for municipality	IBGE
stgov.*	Indicator if the municipal government remained in the president's coalition in year * (1998-2010)	N/A
stopp.*	Indicator if the municipal government remained in the opposition in year * (1998-2010)	N/A
togov.*	Indicator if the municipal government shifted to the president's coalition in year * (1998-2010)	N/A
toopp.*	Indicator if the municipal government shifted to the opposition in year * (1998-2010)	N/A