# current progress for matching Native Forest Law enrolled properties to CIREN cadastre

#### Albert Garcia

## 1 matching enrolled Native Forest Law properties to CIRN rural properties

### 1.1 Native Forest Law property coordinates and projections

```
## Coordinate Reference System:
## No EPSG code
## proj4string: "+proj=utm +zone=19 +south +ellps=aust_SA +units=m +no_defs"
```

### 1.2 Spatially joining using the provided stand coordinates

## [1] 5224

Table 1: spatial join statistics

rptpre_region	$number\_of\_projects$	$number\_of\_stands$	$rol\_match$	$similar\_rol$	stringd	under20
Región de Aysen del General Carlos Ibáñez del Campo	1	1	0.0000000	0.0000000	NaN	NaN
Región de La Araucanía	1722	5386	0.3956554	0.7402525	14.19467	0.7950072
Región de Los Lagos	1368	3287	0.2041375	0.4584728	13.63369	0.8398115
Región de Los Ríos	1312	3403	0.4437261	0.7505143	13.19517	0.8176860
Región de Ñuble	332	740	0.2108108	0.5608108	11.11489	0.8957447
Región de Valparaíso	160	874	0.3935927	0.7894737	18.75287	0.6091954
Región del Bío-Bío	1033	2911	0.3785641	0.7004466	14.69524	0.8305253
Región del Libertador General Bernardo O'Higgins	679	1772	0.4734763	0.7262980	15.65876	0.7751437
Región del Maule	584	1472	0.3043478	0.6508152	15.93137	0.7263815
Región Metropolitana de Santiago	127	918	0.2254902	0.8355120	20.88069	0.6765068

#here, I just see how many rols match between the CIREN data and native forest law data

```
#projects_df is the native forest law projects
#prop_rural.sf is the CIRN data with the rols as simple features object
rol_df <- df_stand %>%
    rename(ROL = rptpre_rol) %>% #renaming rols to be the same in both datasets
    inner_join(prop_rural.sf, by = "ROL") #merge by rol
```

## Warning: Column `ROL` joining character vector and factor, coercing into
## character vector

```
# just creating a df to display only a couple of choice variables
rol_display <- rol_df %>%
select(ROL, NOM_PREDIO, rptpre_nombre)
```

```
rol_display$geometry <- NULL

kable(rol_display[1:20,],
    "latex",
    booktabs =T,
    caption = "merged on rol dataframe"
    ) %>%
    kable_styling(latex_options = "hold_position", font_size = 6)
```

Table 2: merged on rol dataframe

ROL	NOM_PREDIO	rptpre_nombre
160-15	EL CARMEN	LOS MANZANOS
160-15	NA	LOS MANZANOS
160-15	BARANDICA HIJUELA 4	LOS MANZANOS
160-15	EL LITRE	LOS MANZANOS
160-15	LA HUACHA	LOS MANZANOS
160-15	PREDIO SAN AGUSTIN SECTOR RELBUN	LOS MANZANOS
160-15	PEUMO PICHILO S/N CARAMPANGUE	LOS MANZANOS
160-15	UITENTO	LOS MANZANOS
160-15	EL DAO AGUANTAO HJ 48	LOS MANZANOS
304-121	EL ESCUDO PARCELA N 18	PARCELA N°18
304-121	HIJUELA 7 HEULIO COM CATREFOL	PARCELA N°18
304-121	EL ESCUDO PARCELA N 18	PARCELA N°18
304-121	HIJUELA 7 HEULIO COM CATREFOL	PARCELA N°18
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21
3290-9	EL MIRADOR PC 21 VILCUN TEMUCO	PARCELA N°21

length(unique(rol\_df\$ROL)) #find number of unique rol numbers found

## [1] 4982