

Day 3 – Hybrid Machine Learning + Geostatistics

Today's Goal

Integrate:

- ▶ Machine learning
- ▶ Spatial geostatistics
- ▶ Hybrid prediction modelling

Load Data

```
library(readr)
hybrid_ml_geo <- read_csv("../data/hybrid_ml_geostatistical_data.csv")
head(hybrid_ml_geo)
```

```
# A tibble: 6 x 11
  id    utm_x     utm_y n_tested n_pos prevalence_true ml_signal_true
  <dbl>   <dbl>     <dbl>     <dbl>     <dbl>             <dbl>             <dbl>
1 1    279090.  838870.      63       0      0.00167        -5.04
2 2    57751.   672968.     125       0      0.000452        -6.60
3 3    160759.  1365476.     139       0      0.00694        -3.80
4 4    949111.  1230481.     126       0      0.000334        -7.10
5 5    434005.  682490.      97       0      0.00205        -5.51
6 6   -91406.   925776.     122       3      0.00767        -3.16
# i 4 more variables: S_residual_true <dbl>, elevation <dbl>, ndvi <dbl>,
```