

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    387215. 1485399.      59     0    0.000334        -7.06
2 2    1046370. 758144.      180     8    0.0496         -1.66
3 3    681525. 1102741.      164    22    0.167          -0.980
4 4    713355. 1127489.      62     0    0.00476        -4.17
5 5    276748. 1384709.      84     0    0.00000423       -11.6
6 6   -112576. 1315376.      60     0    0.000000669      -12.5
# i 4 more variables: S_residual_true <dbl>, elevation <dbl>, ndvi <dbl>,
```