

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>,