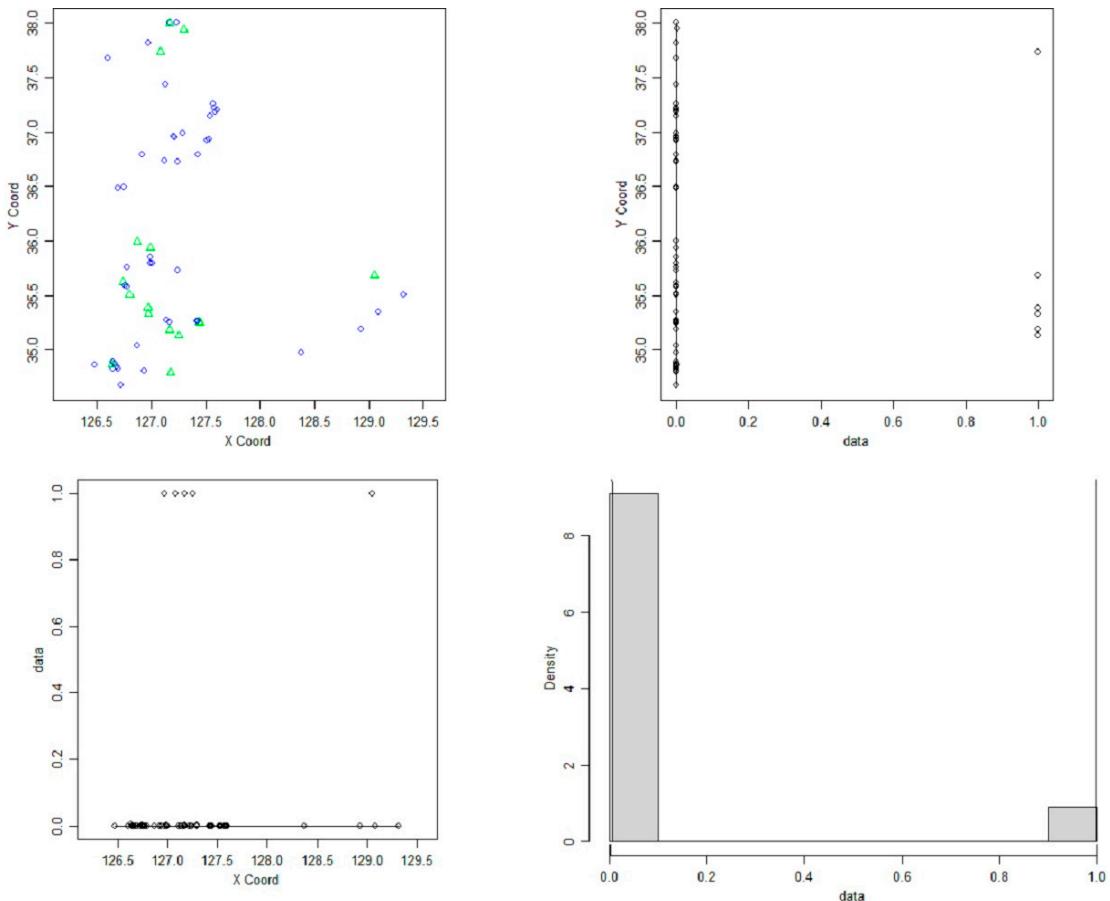


Supplementary Figure 1. Shows the trend in the point prevalence data



Supplementary Table S1. Summary of spherical variogram model to best fit the data

---

summary(VarioMod_sph)
\$pmethod
[1] "WLS (weighted least squares)"
\$cov.model
[1] "spherical"
\$spatial.component
sigmasq   phi
0.07330318 0.20875158
\$spatial.component.extra
kappa
0.5
\$nugget.component
tausq
0.009230274

---

```
$fix.nugget
[1] FALSE


---


$fix.kappa
[1] TRUE


---


$practicalRange
[1] 0.2087516


---


$sum.of.squares
  value
  2.745433


---


$estimated.pars
  tausq   sigmasq     phi
0.009230274 0.073303184 0.208751579


---


$weights
[1] "npairs"


---


$call
variofit(vario = Vario, cov.model = "sph")


---


attr("class")
[1] "summary.variomodel"
```

Supplementary Table S2. Summary of Exponential variogram model

```
summary(VarioMod_exp)
$pmethod
[1] "WLS (weighted least squares)"
$cov.model
[1] "exponential"
$spatial.component
sigmasq      phi
0.0788204422 0.0007487053
$spatial.component.extra
kappa
0.5
$nugget.component
tausq
0
$fix.nugget
[1] FALSE
$fix.kappa
[1] TRUE
$practicalRange
[1] 0.00223611
$sum.of.squares
value
3.047481
$estimated.pars
```

---

```
tausq    sigmasq     phi
0.00000000000 0.0788204422 0.0007487053
```

---

```
$weights
[1] "npairs"
$call
variofit(vario = Vario, cov.model = "exp")
attr("class")
[1] "summary.variomodel"
```

---