# Solutions for Frederikke

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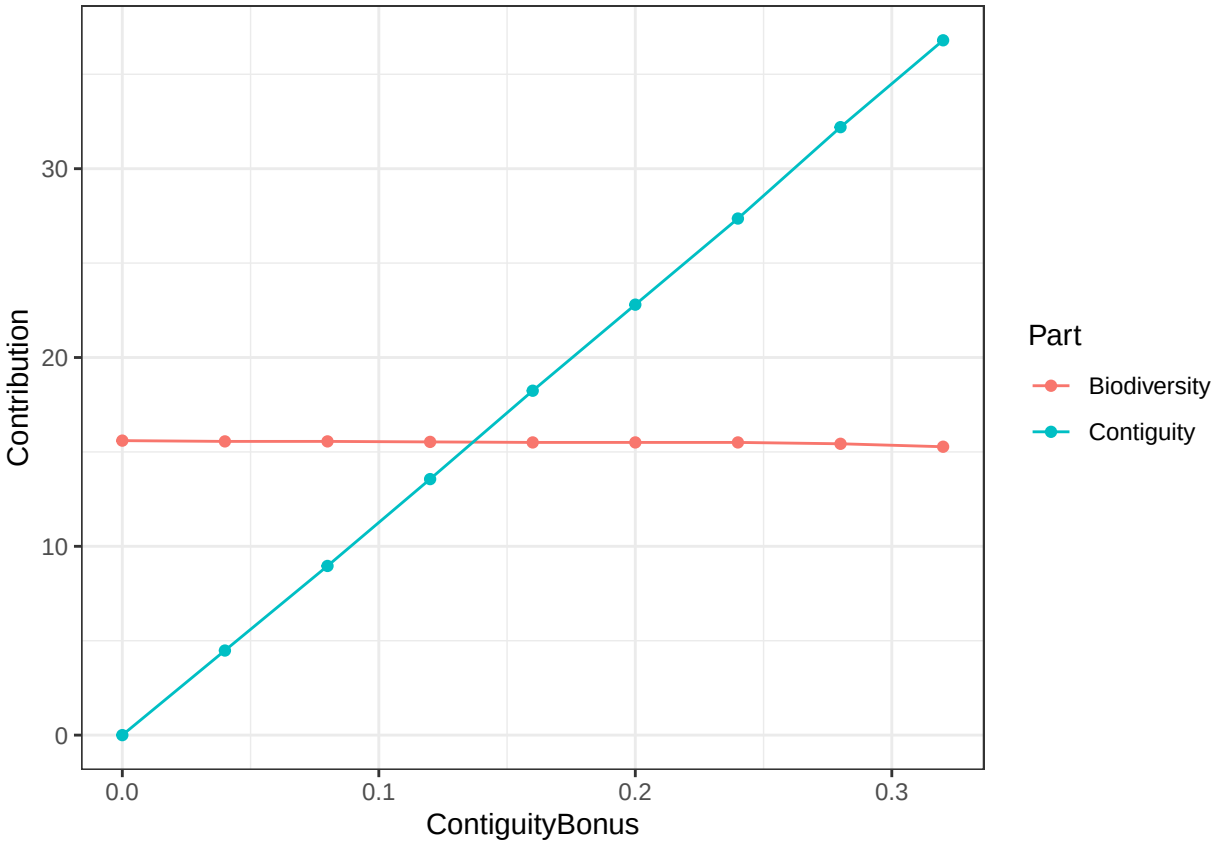
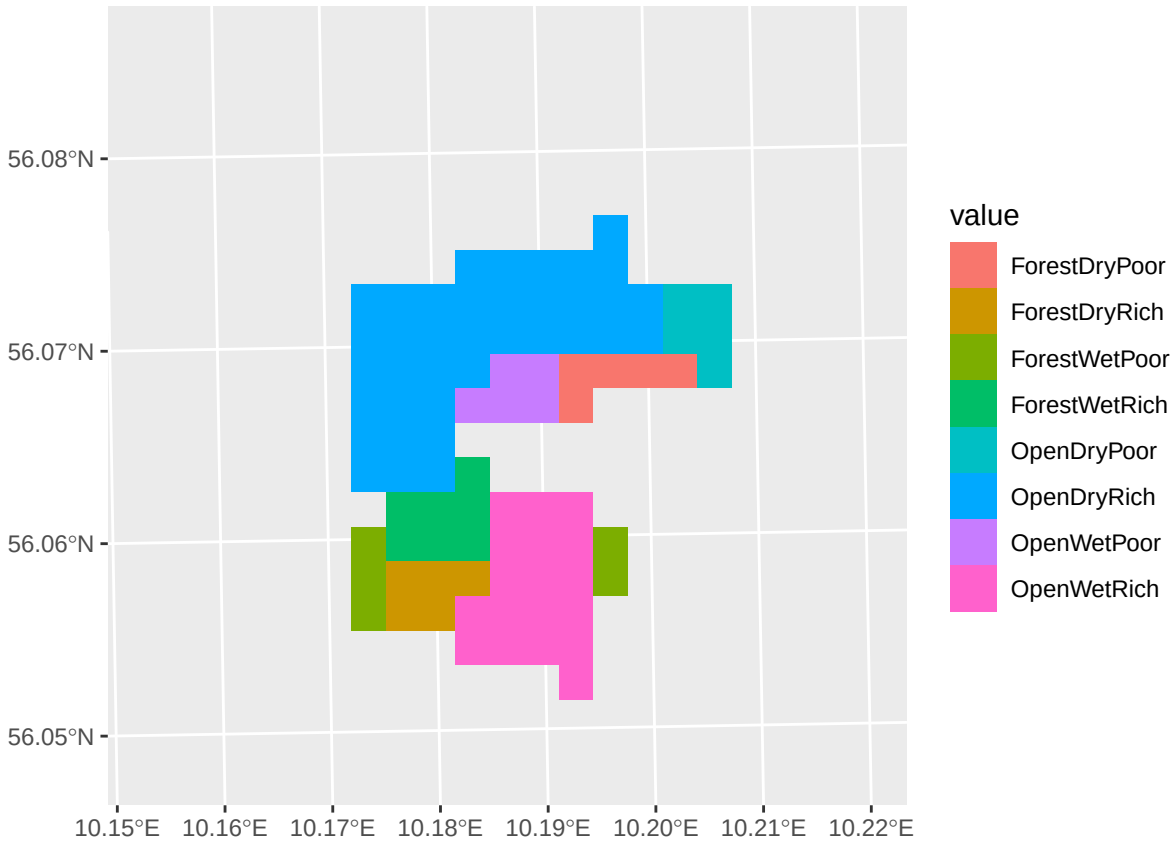
In this document we will compile the results of the optimization, as shown in other examples there is a tradeoff between contiguity and biodiversity, since we have 6 solutions we will gather in this report only the closest solution to an equilibrium

## Scenario 1 Optimization for GBIF data only

First we need to check at what value we find the best balance

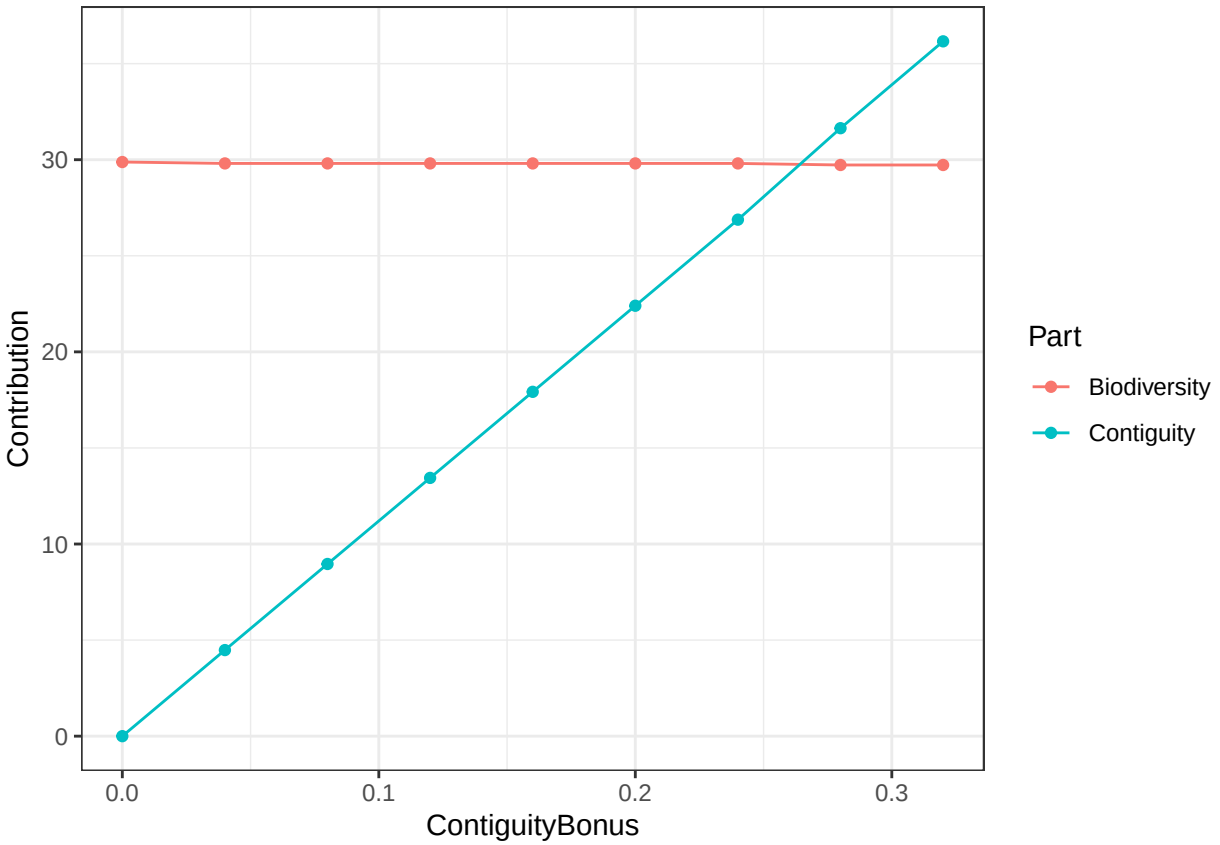



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.12, based on that the solution within this problem is

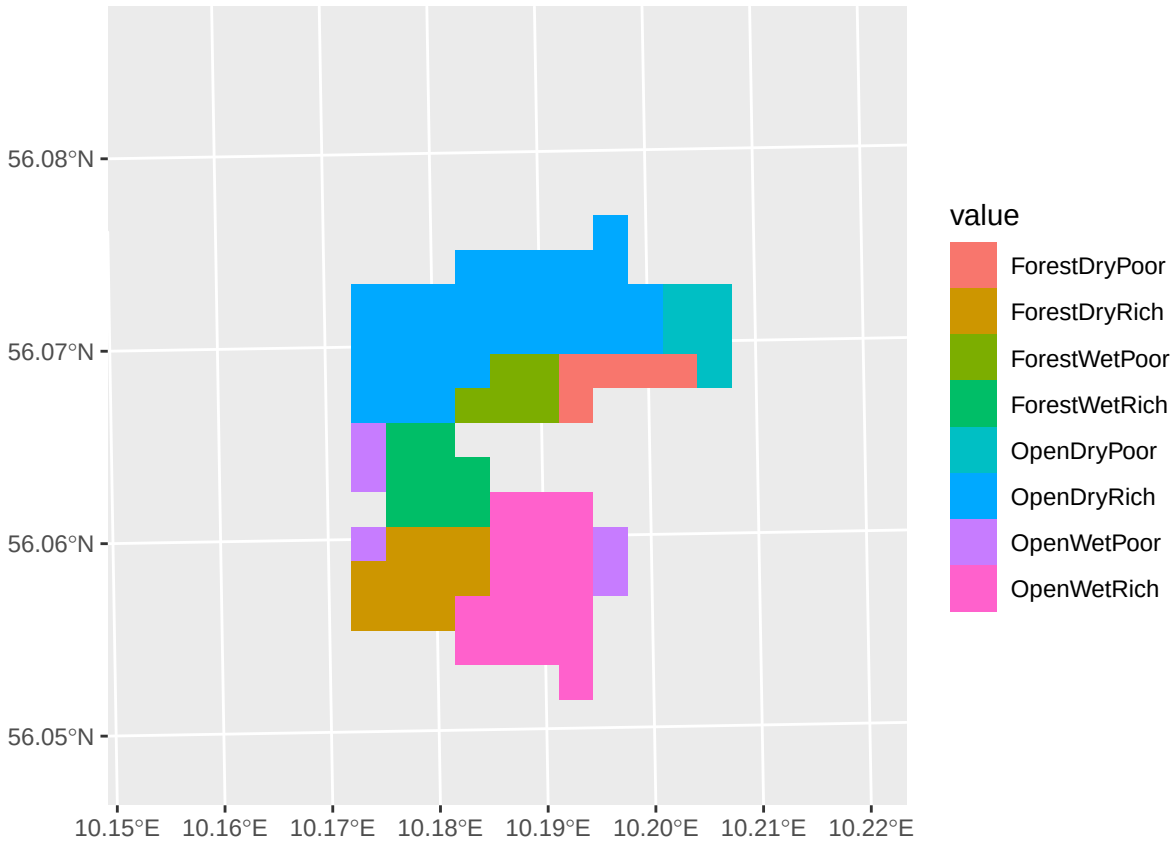



## Scenario 2 Optimization for field data

First we need to check at what value we find the best balance

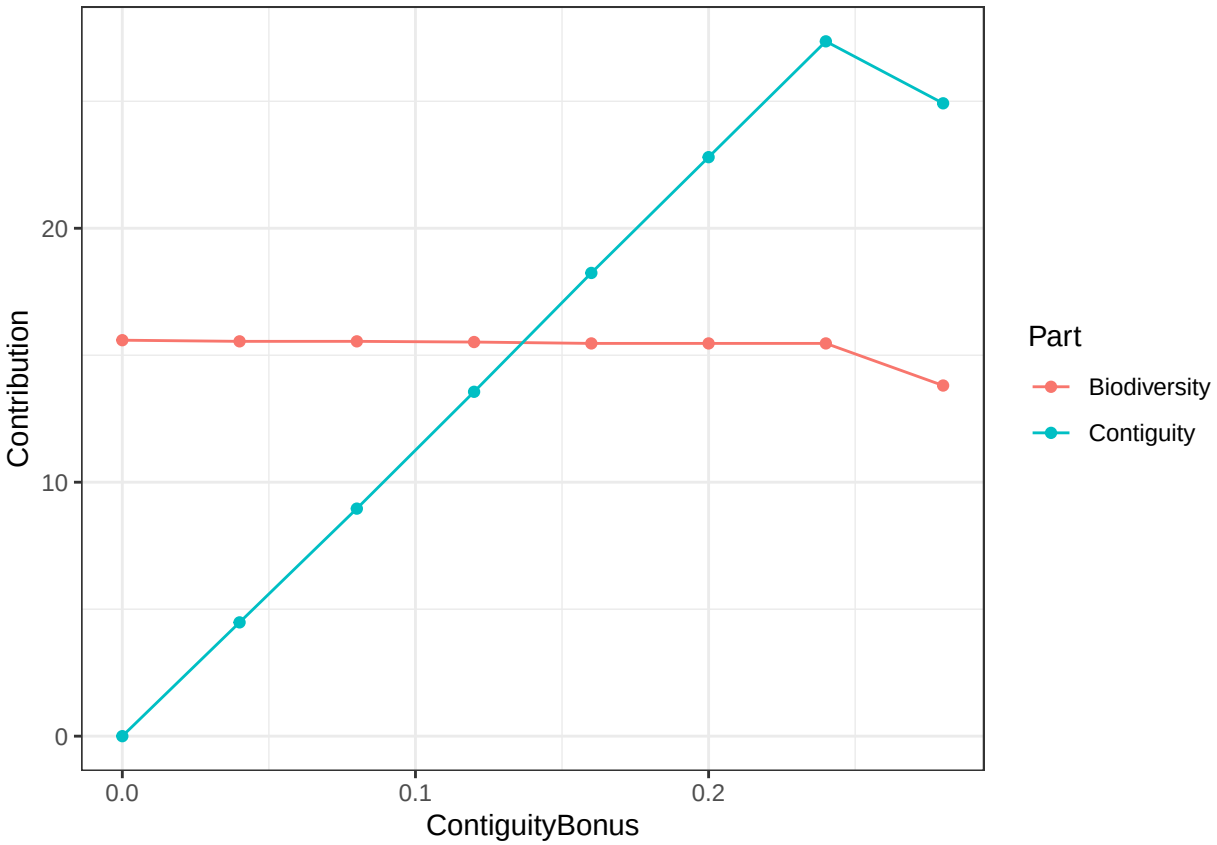



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.24, based on that the solution within this problem is

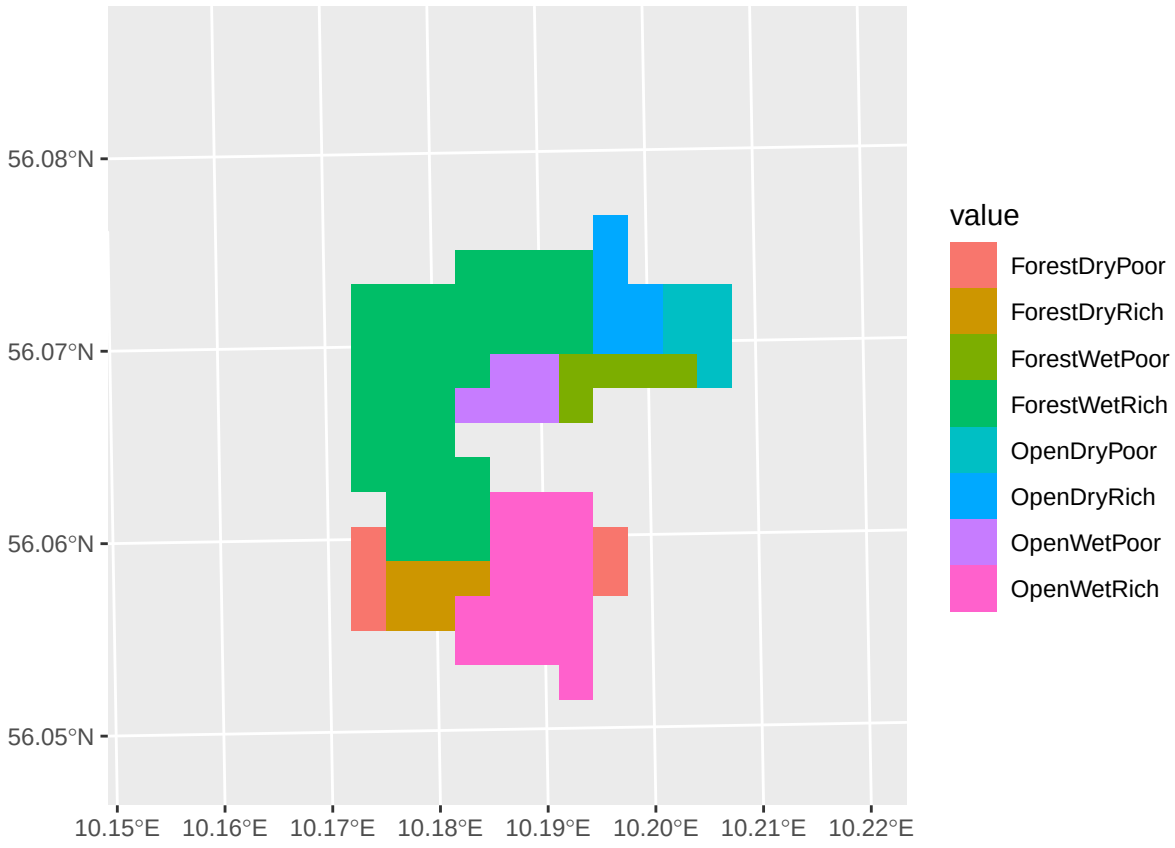



### Scenario 3 Optimization for GBIF data with Scalgo

First we need to check at what value we find the best balance

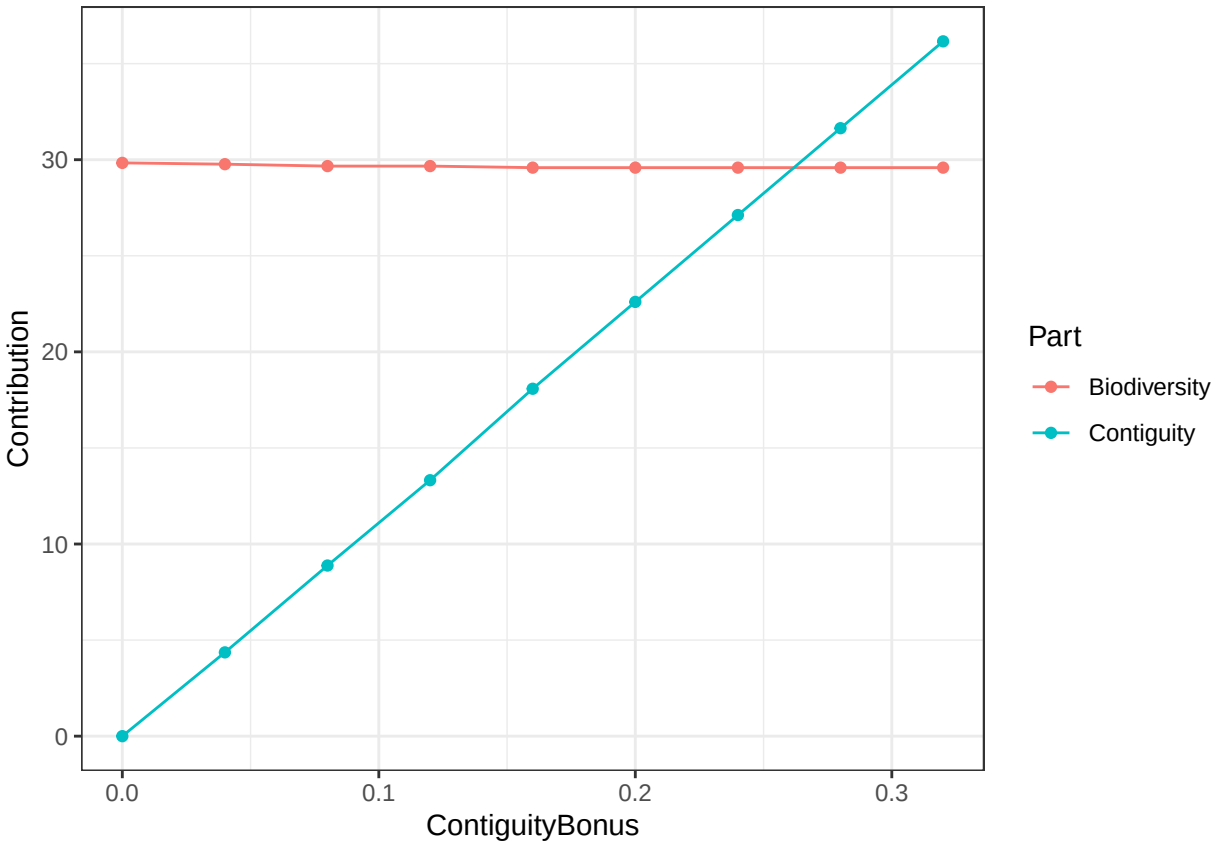



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.12, based on that the solution within this problem is

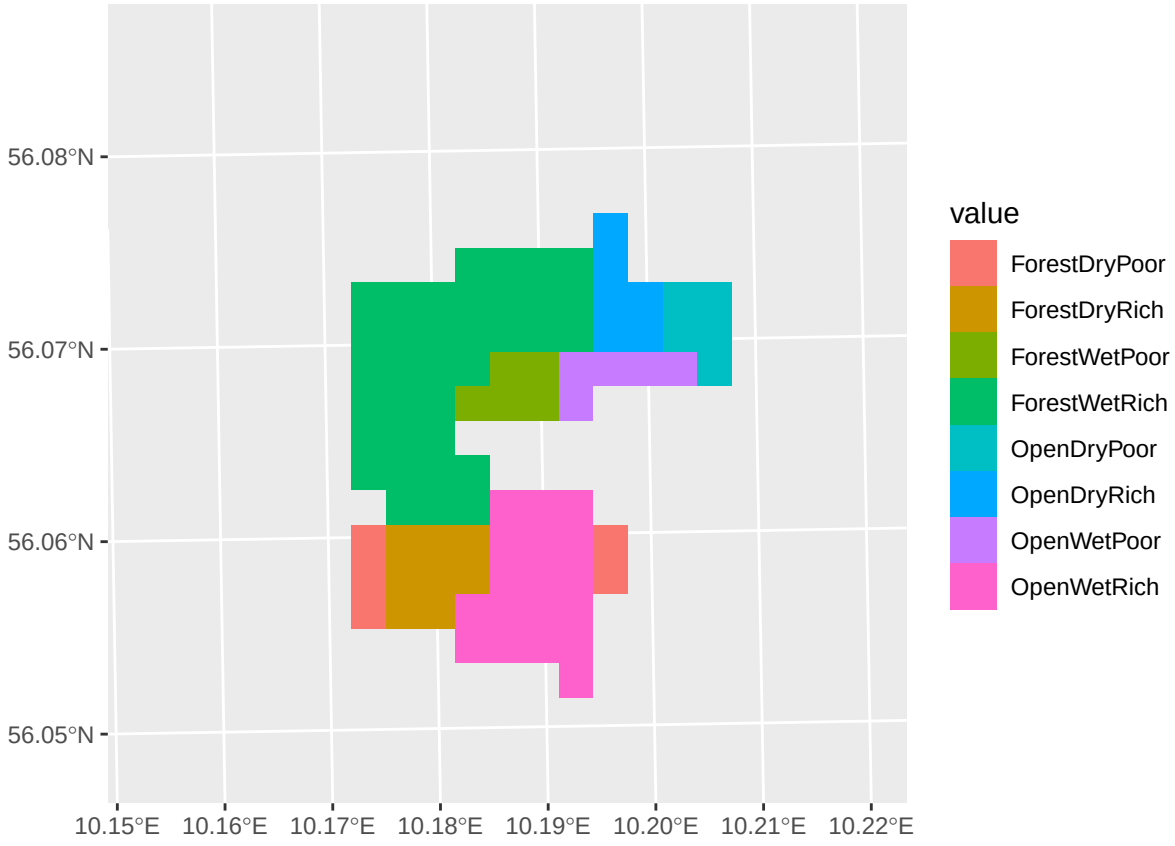



### Scenario 4 Optimization for field data with Rain

First we need to check at what value we find the best balance

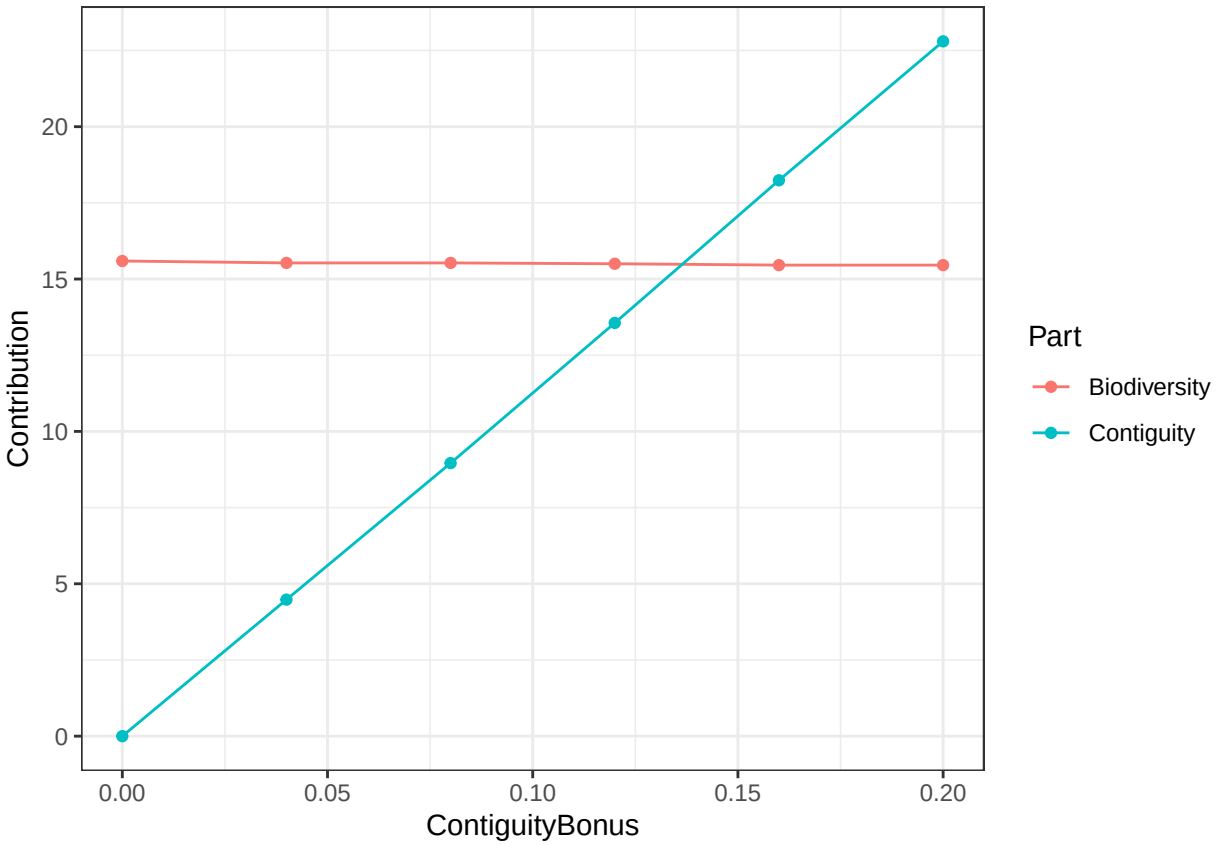



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.24, based on that the solution within this problem is

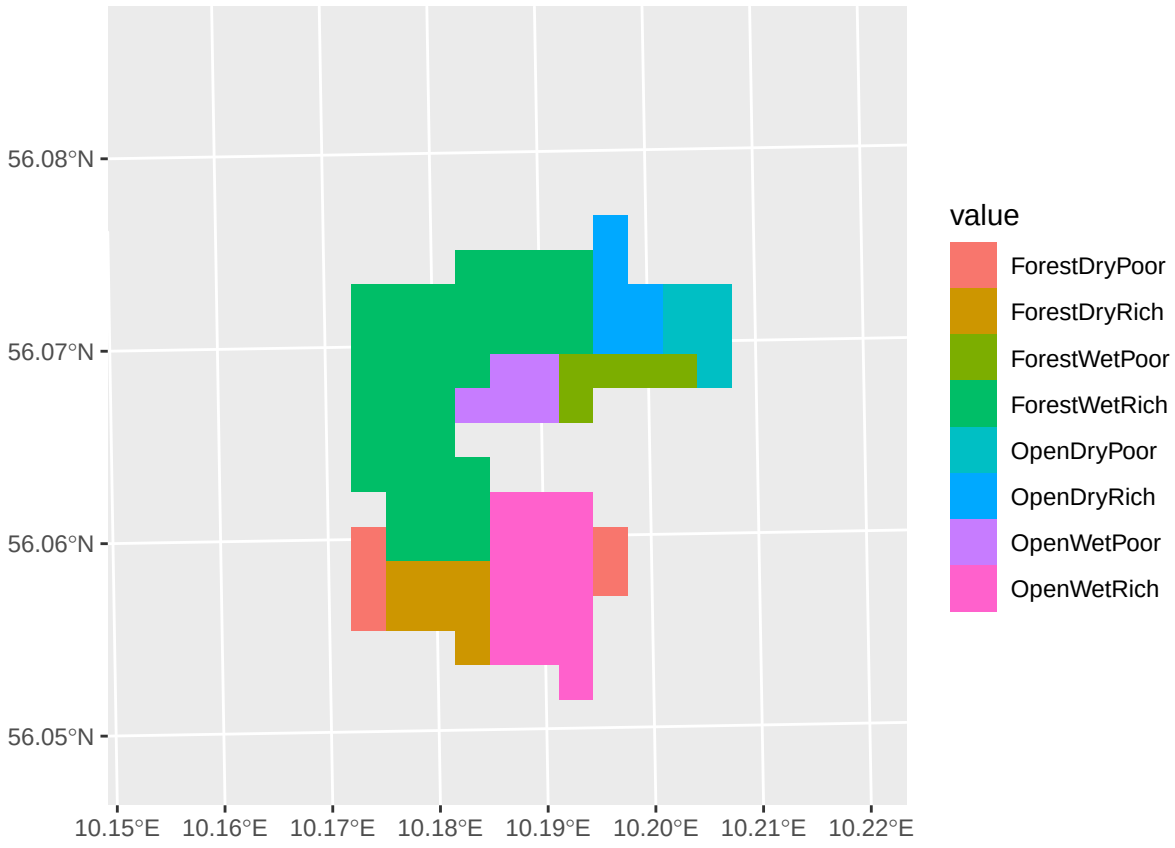



### Scenario 5 Optimization for GBIF data with Scalgo and proportions

First we need to check at what value we find the best balance

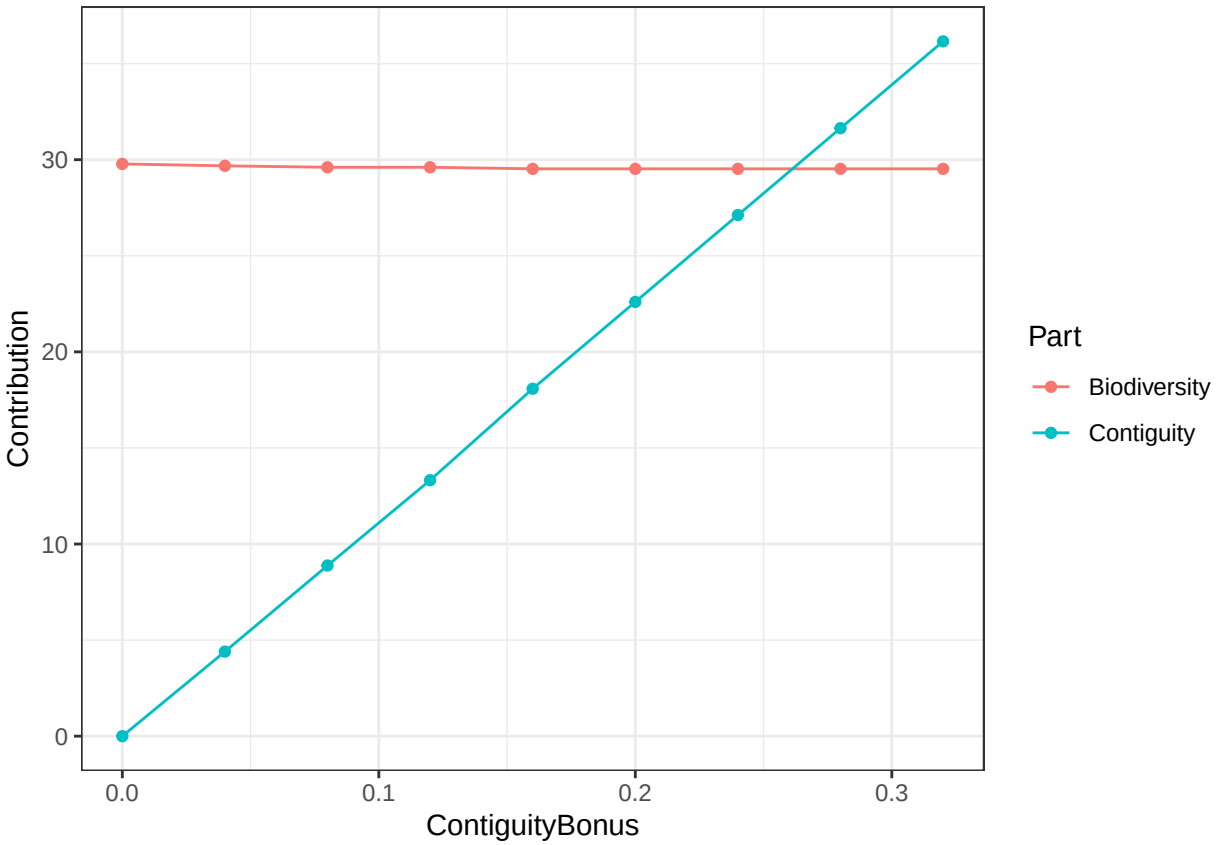



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.12, based on that the solution within this problem is

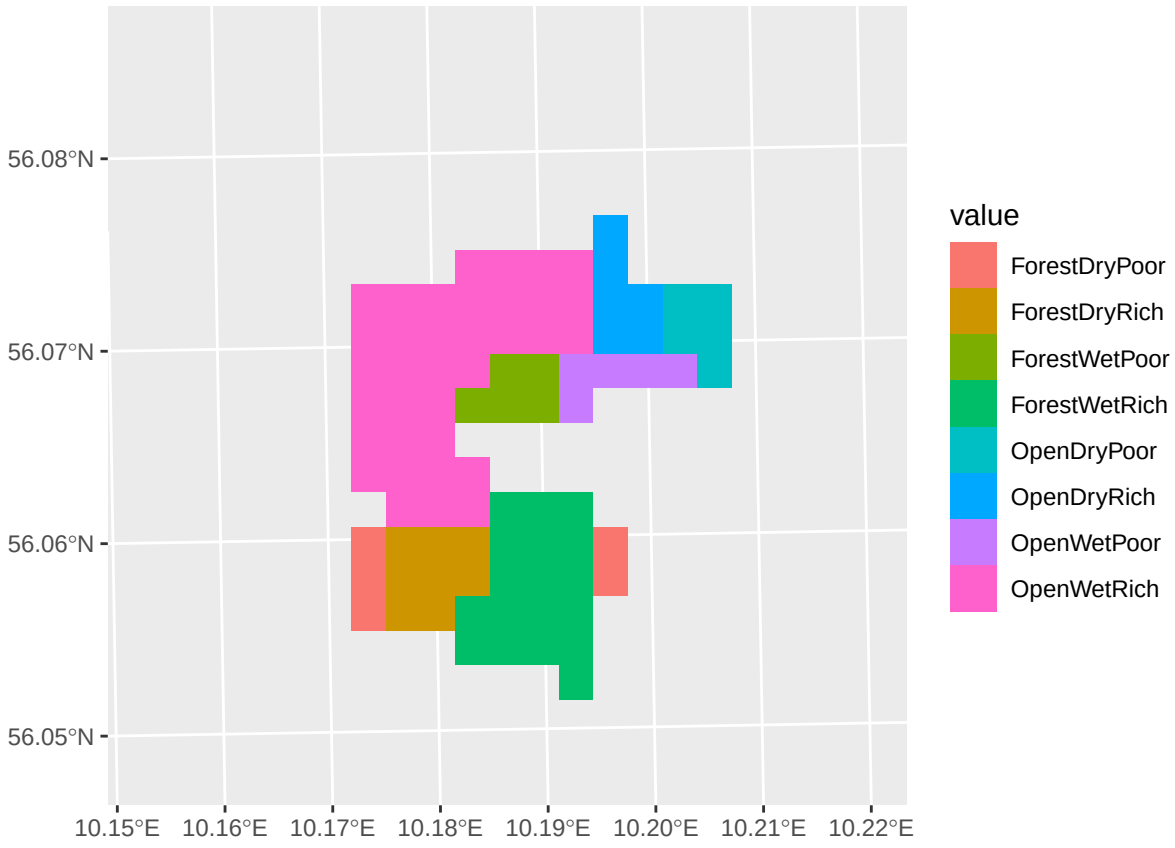



### Scenario 6 Optimization for field data with Rain and Forest

First we need to check at what value we find the best balance

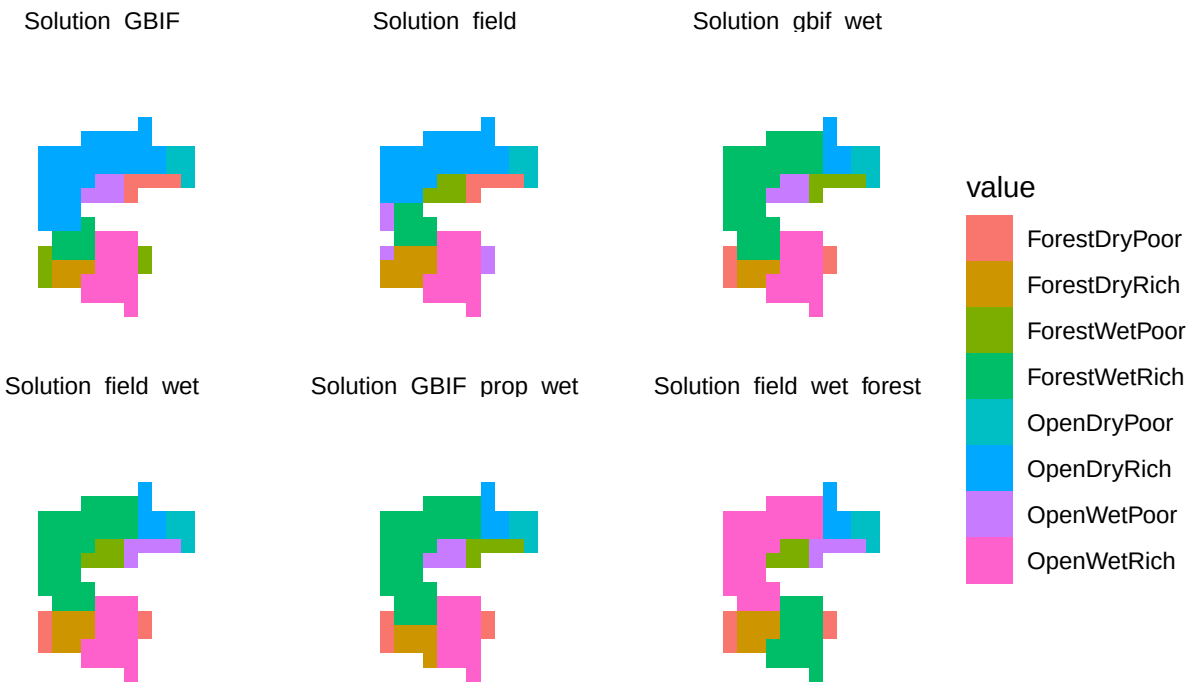



From this we can see that the optimal value for the most balanced Contiguity bonus is 0.24, based on that the solution within this problem is




## All solutions

here is a comparison of all solutions


Solution GBIF
Solution field
Solution gbif wet
Solution field wet
Solution GBIF prop wet
Solution field wet forest
value
ForestDryPoor
ForestDryRich
ForestWetPoor
ForestWetRich
OpenDryPoor
OpenDryRich
OpenWetPoor
OpenWetRich