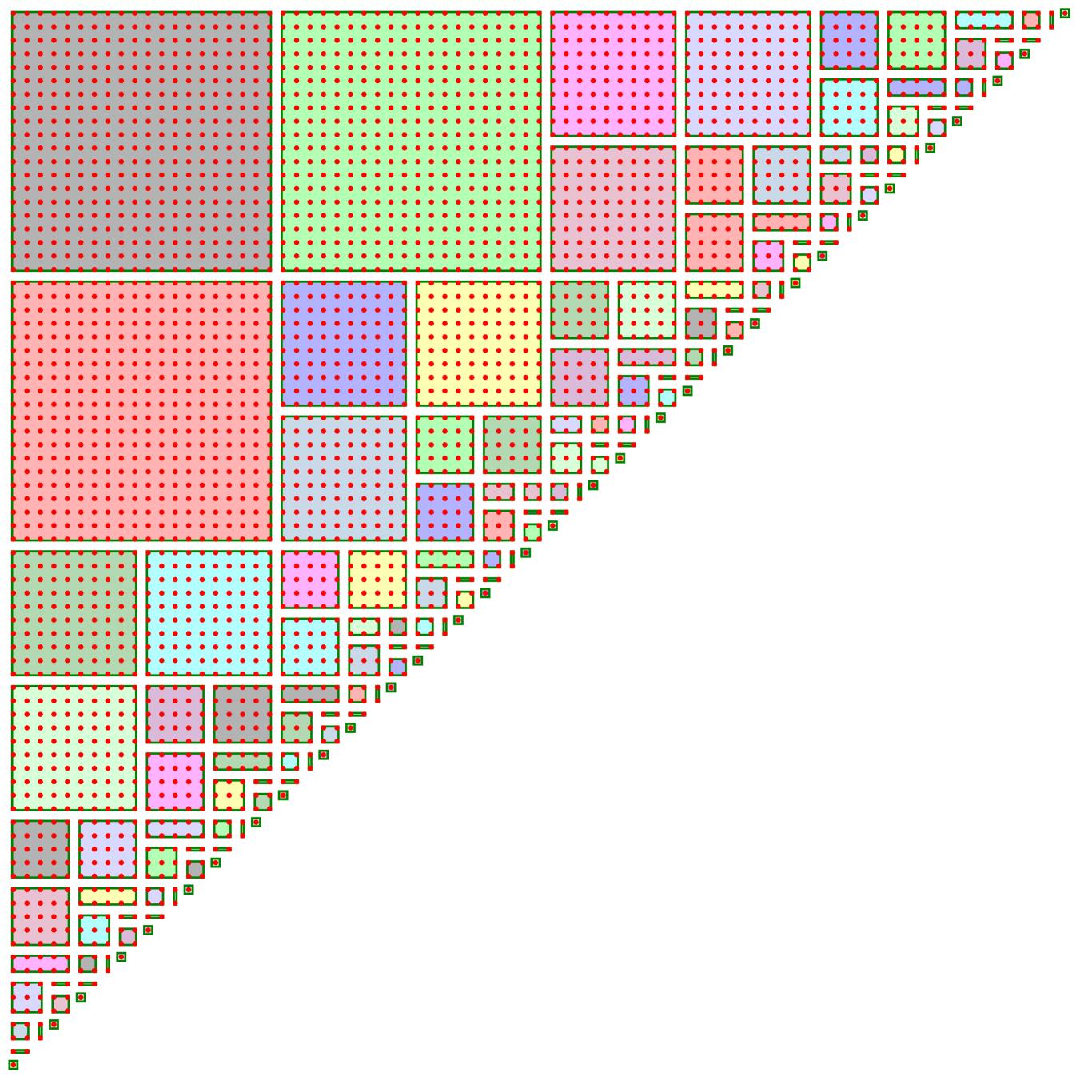
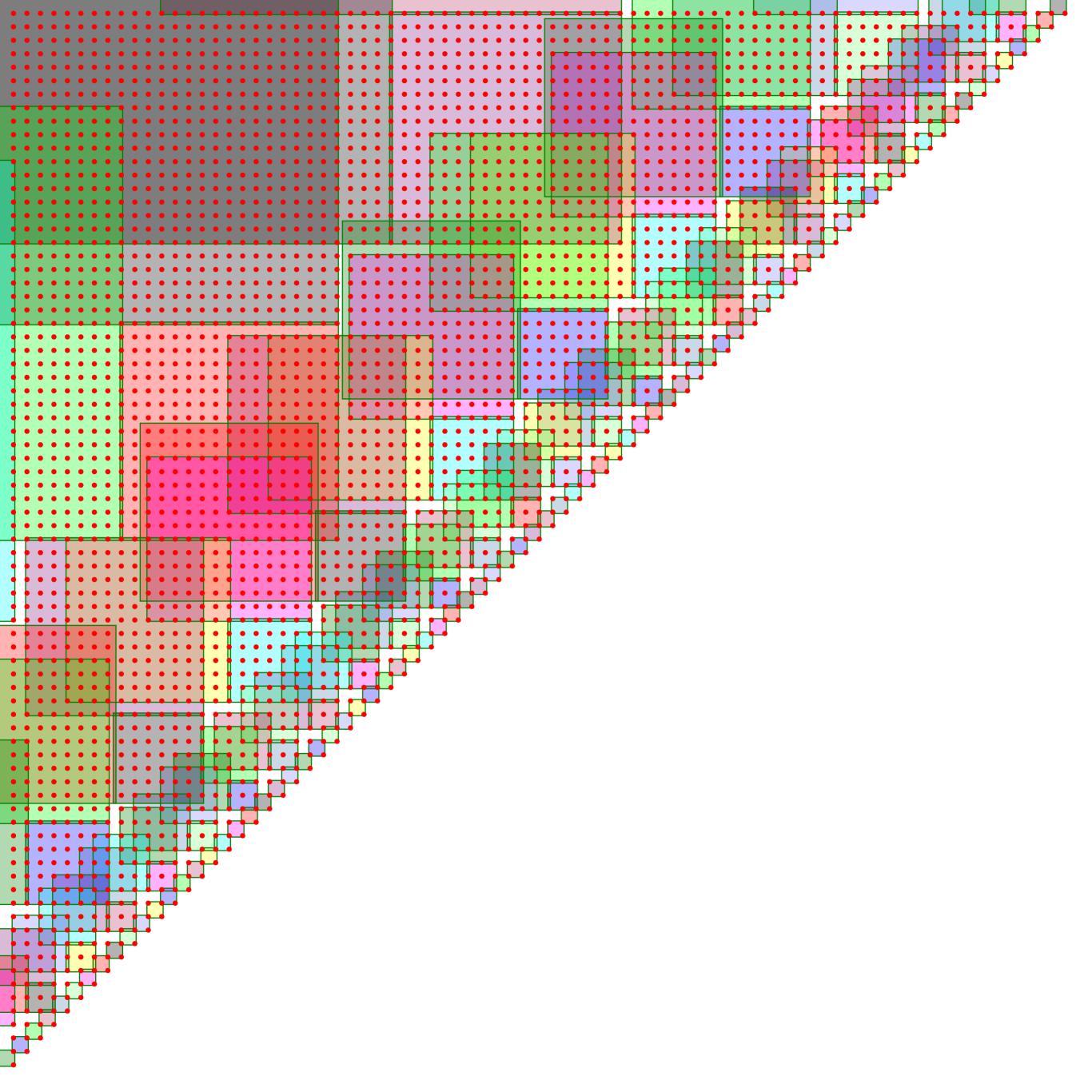
```
WSPD cover
n = 80
ε = 1
N = 3160 (# of grid points)
|WSPD| = 177
```

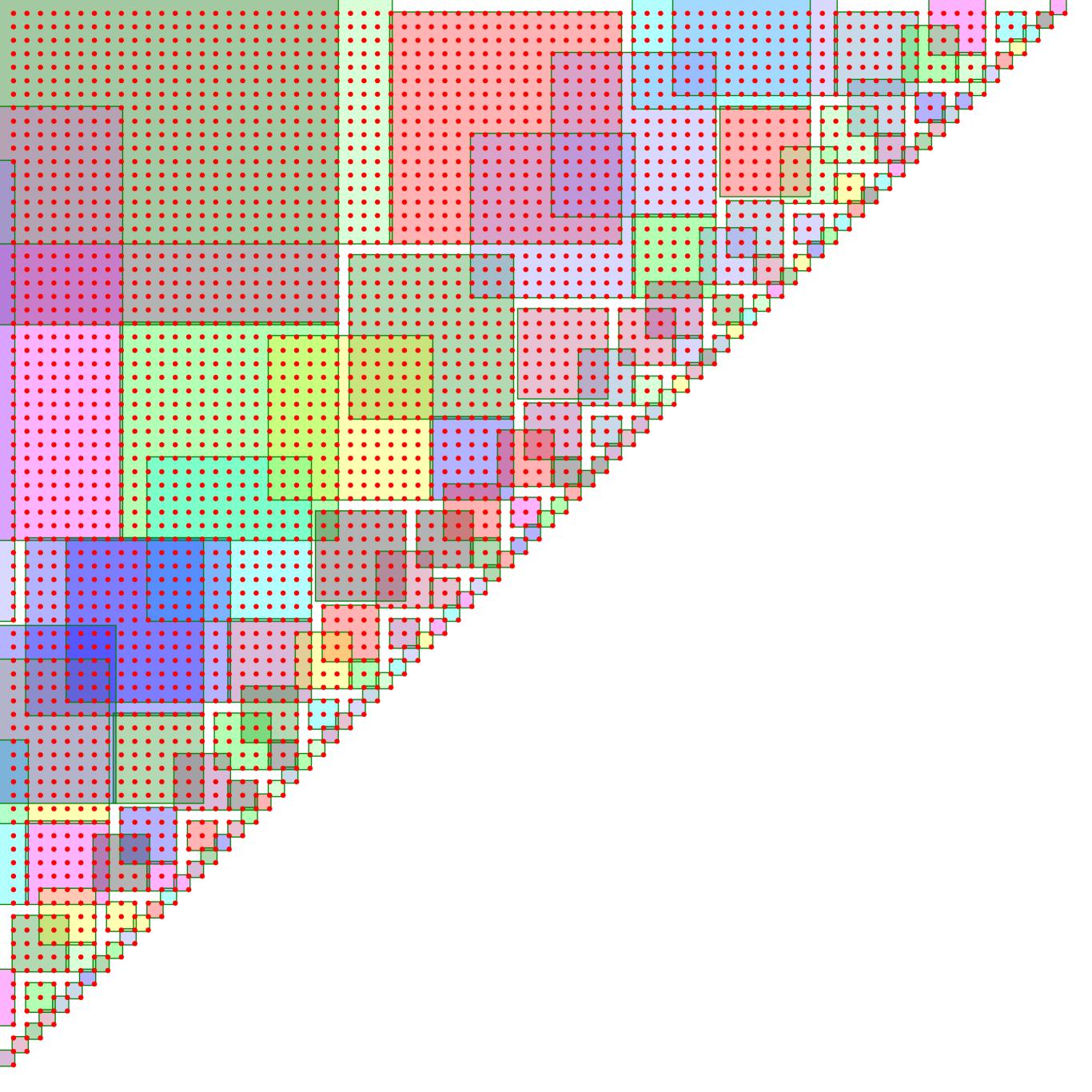


3 approx cover n = 80 |3-approx| = 189

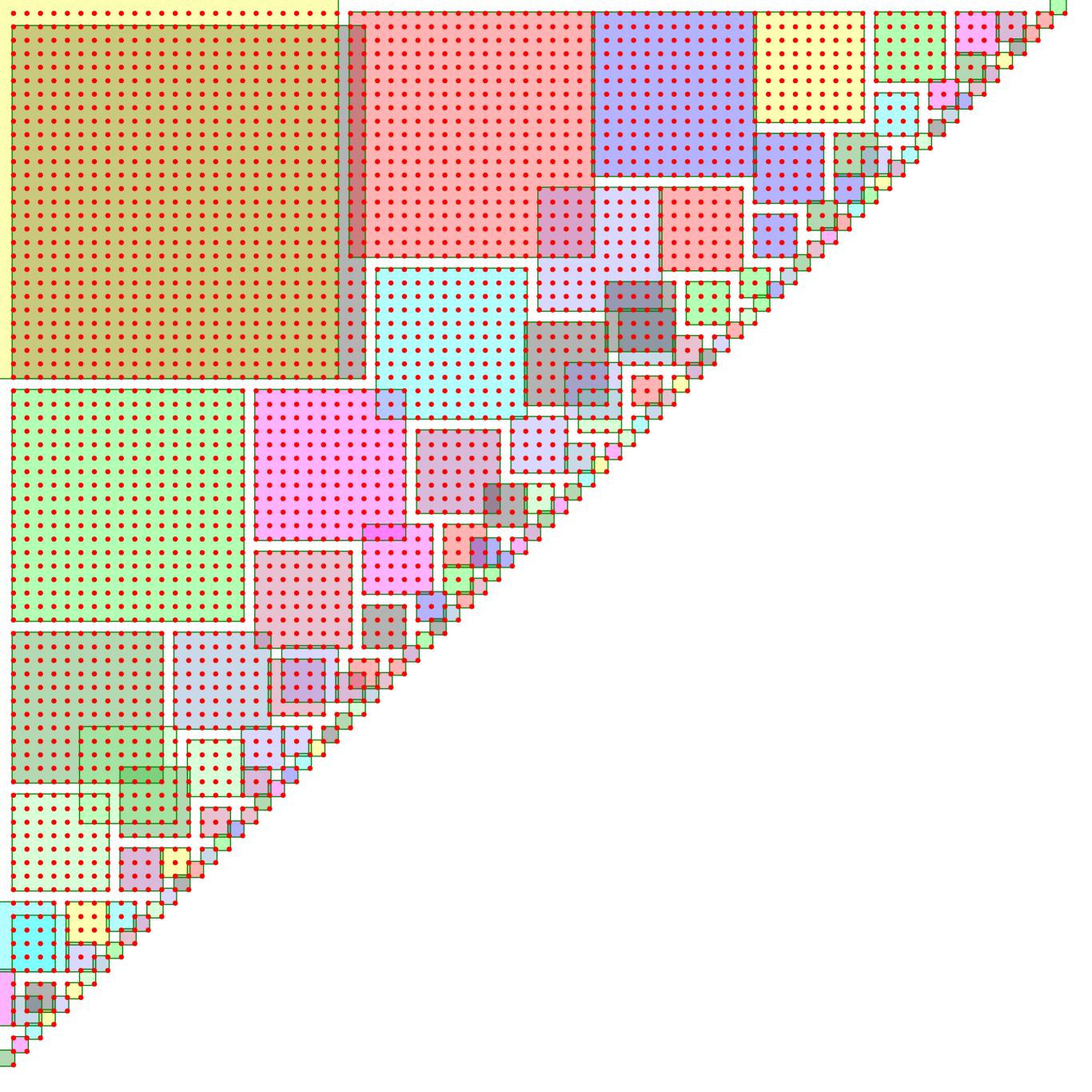


3 approx cover (clean) n = 80 |3-approx-clean| = 156

Cleaning is done using greedy cover on the 3-approx solution computed.

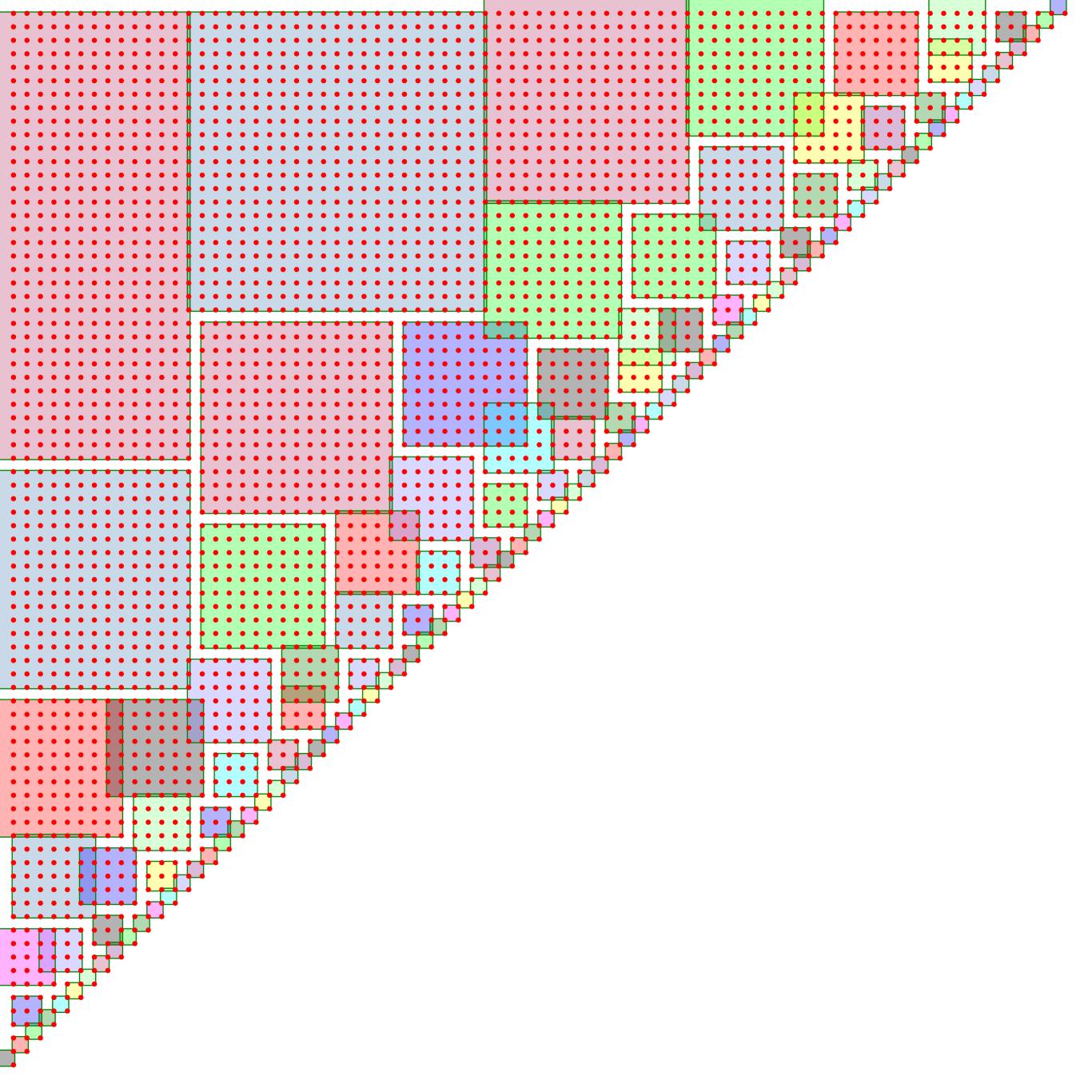


Greedy cover n = 80 $\epsilon = 1$ |Greedy| = 146 Solution computed by setting up the set system, and using greedy set-cover to solve it.



IP cover
n = 80
ε = 1
|IP| = 134

Set up the natural IP for set-cover, and solve it exactly using Gurobi



```
Summary
n = 80 (N=3160)

ε = 1
|IP| = 134
|Greedy| = 146
|WSPD| = 177
|3-aprx| = 189
|3-aprx-c| = 156
```