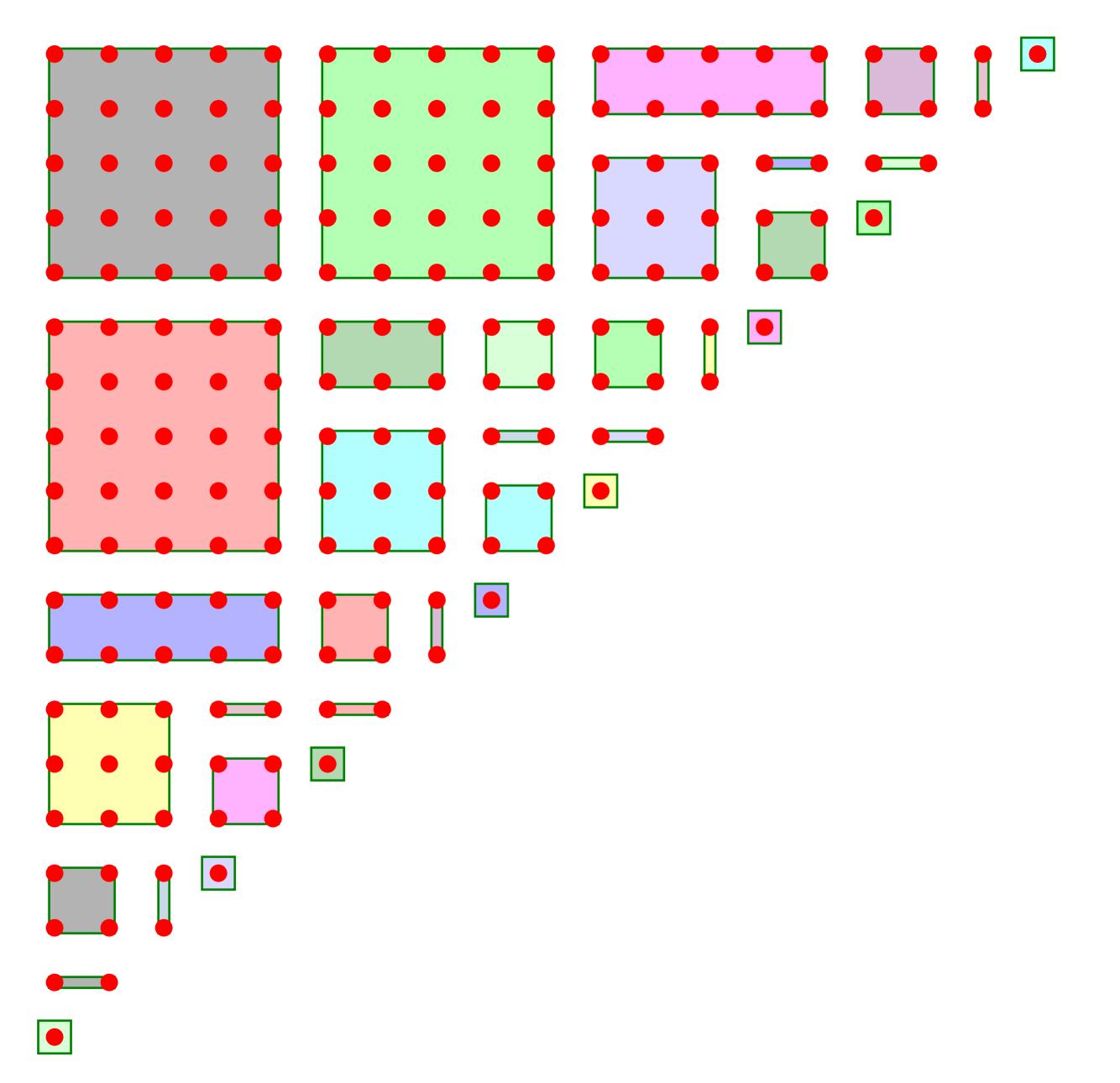
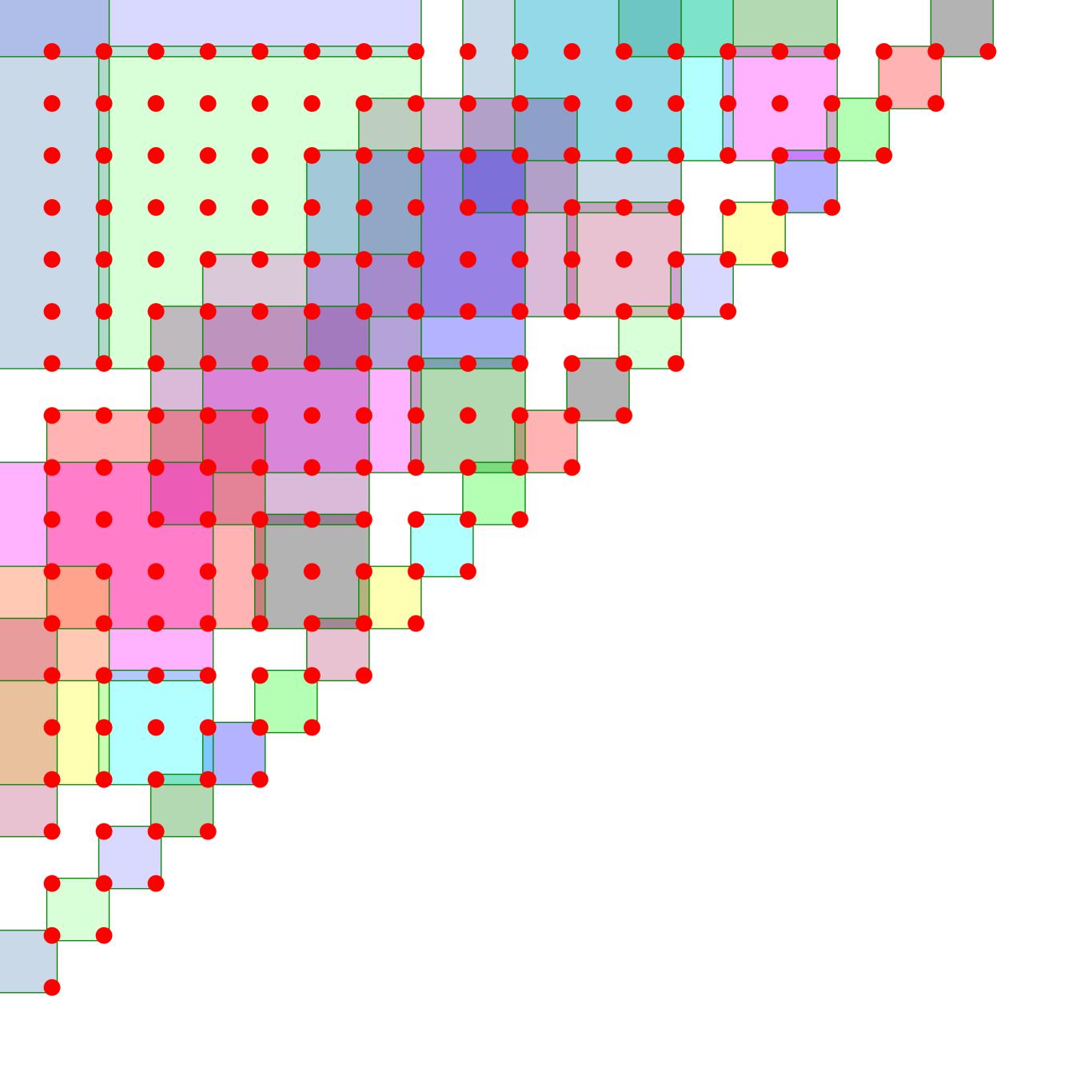
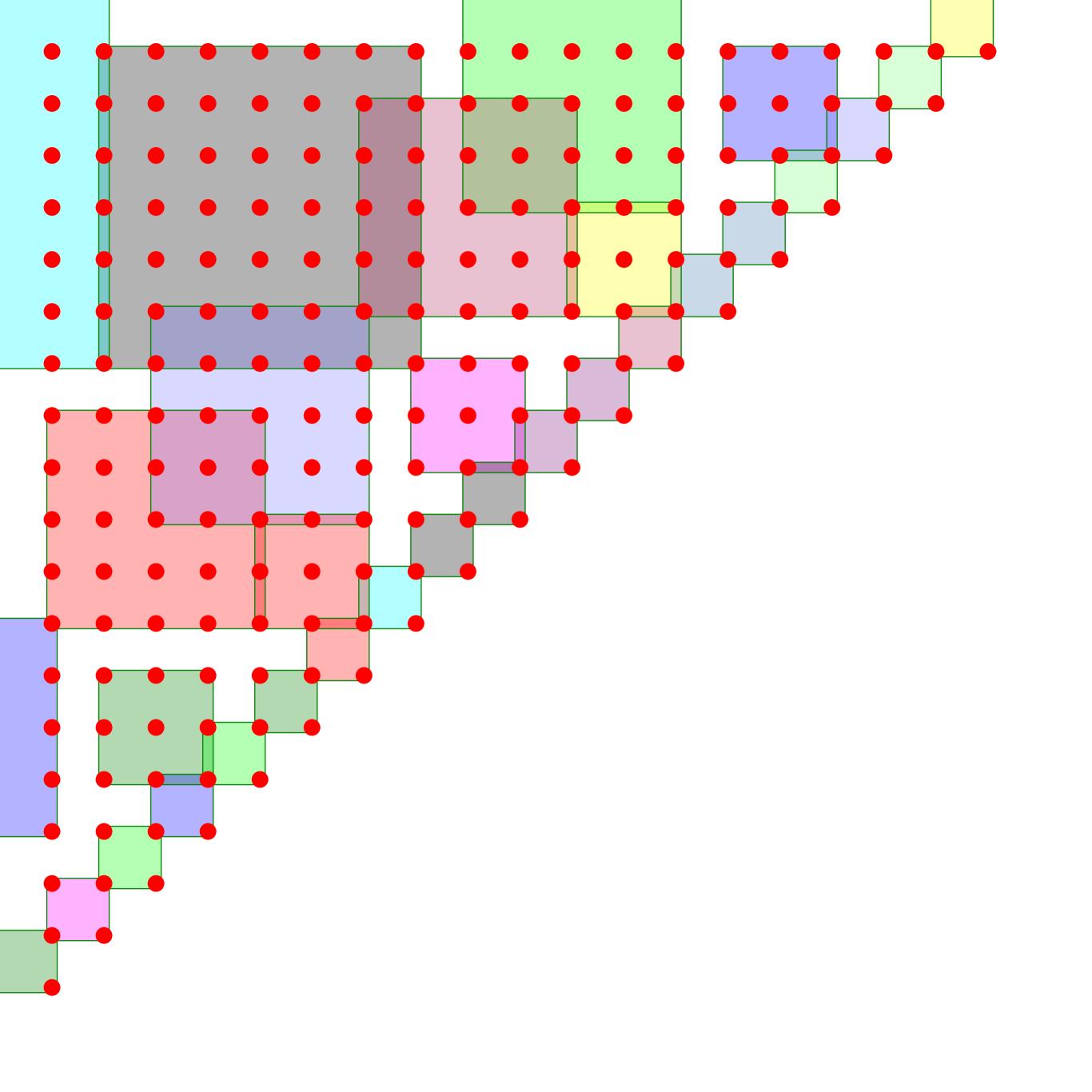
```
WSPD cover
n = 20
ε = 1
N = 190 (# of grid points)
|WSPD| = 36
```



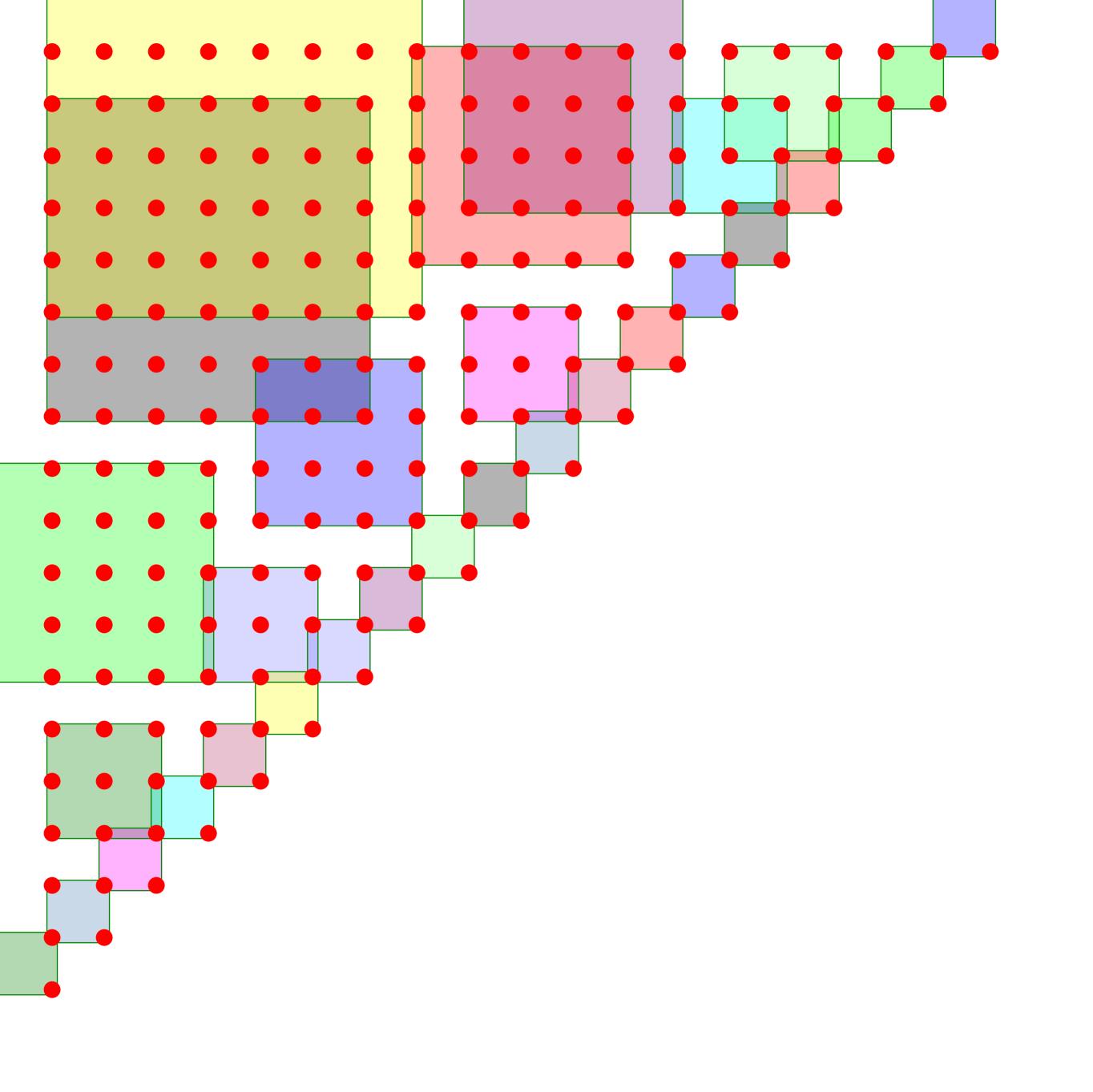
3 approx cover n = 20 |3-approx| = 38



3 approx cover (clean)
n = 20
|3-approx-clean| = 31
Cleaning is done using greedy cover on the 3-approx solution computed.

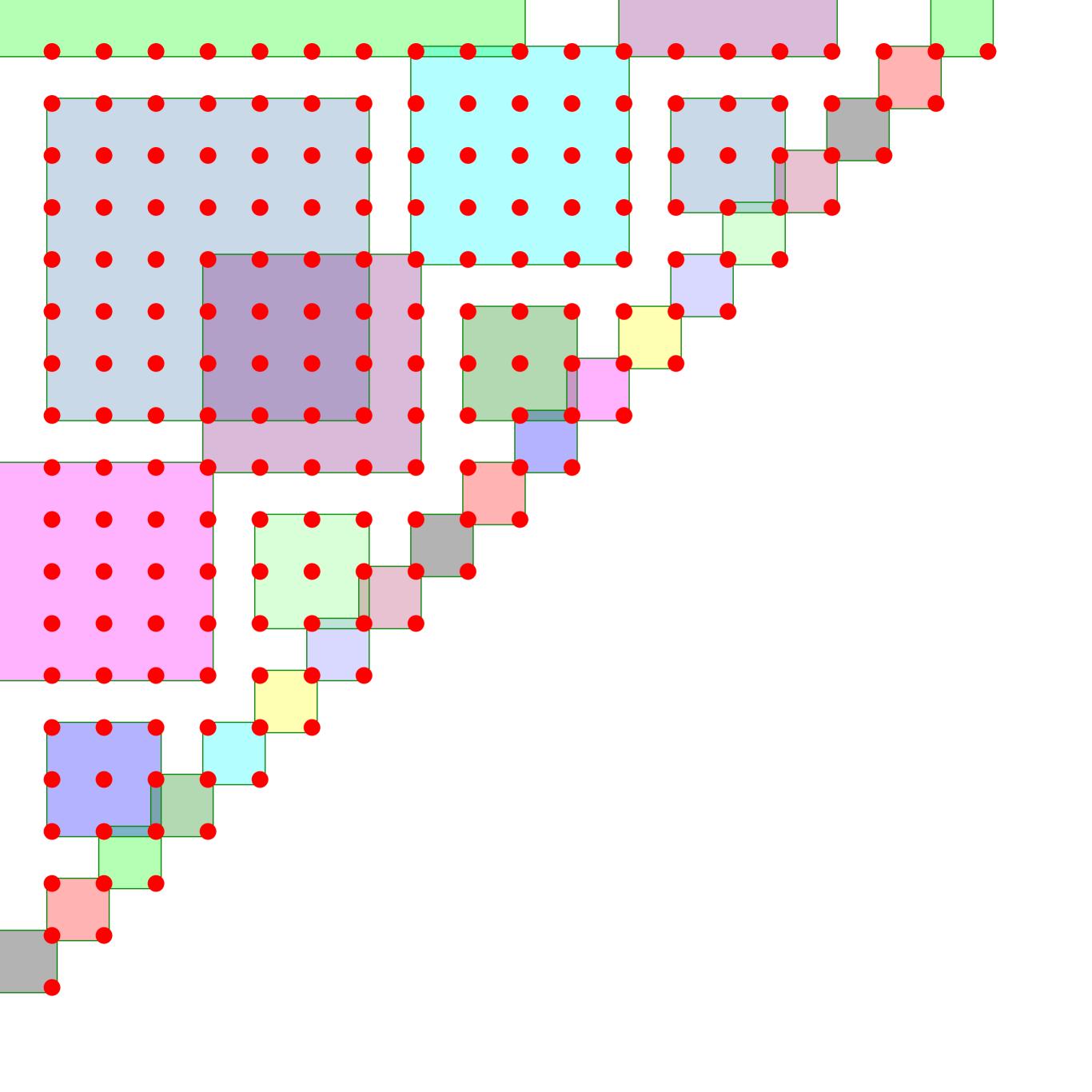


Greedy cover n = 20 $\epsilon = 1$ |Greedy| = 30 Solution computed by setting up the set system, and using greedy set-cover to solve it.



IP cover
n = 20
ε = 1
|IP| = 29

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



```
Summary
n = 20 (N=190)
\(\epsilon = 1\)
|IP| = 29
|Greedy| = 30
|WSPD| = 36
|3-aprx| = 38
|3-aprx-c| = 31
```