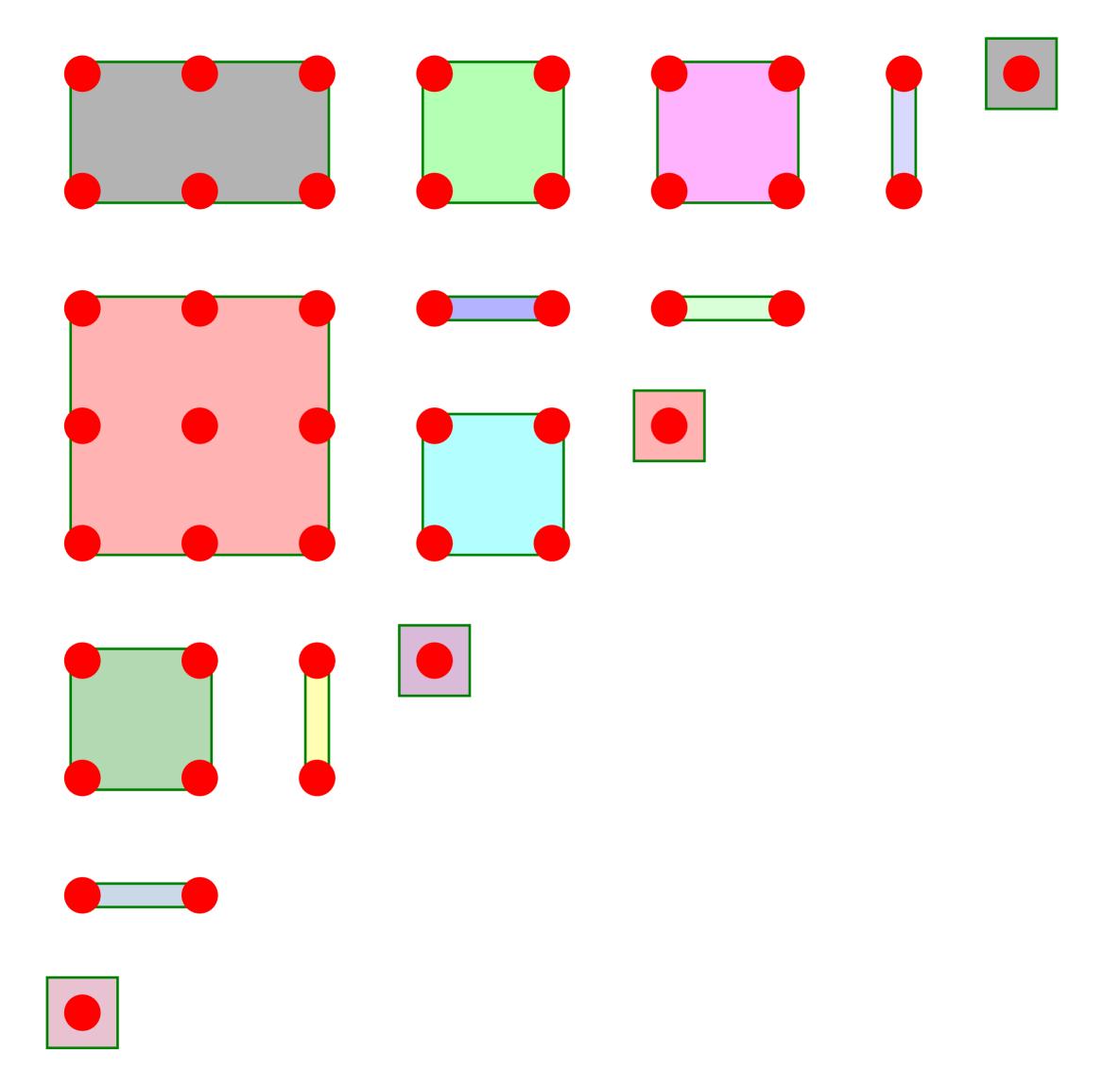
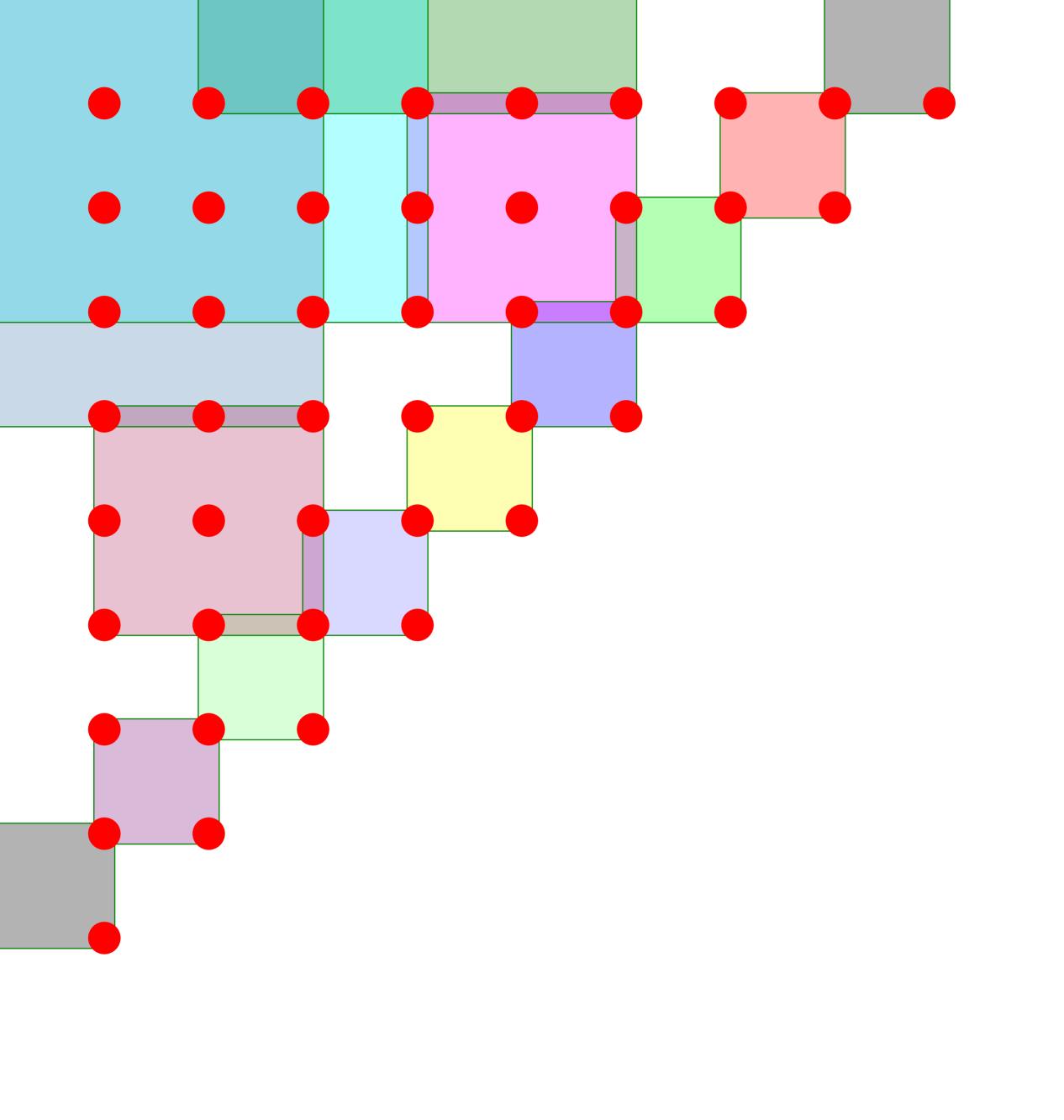
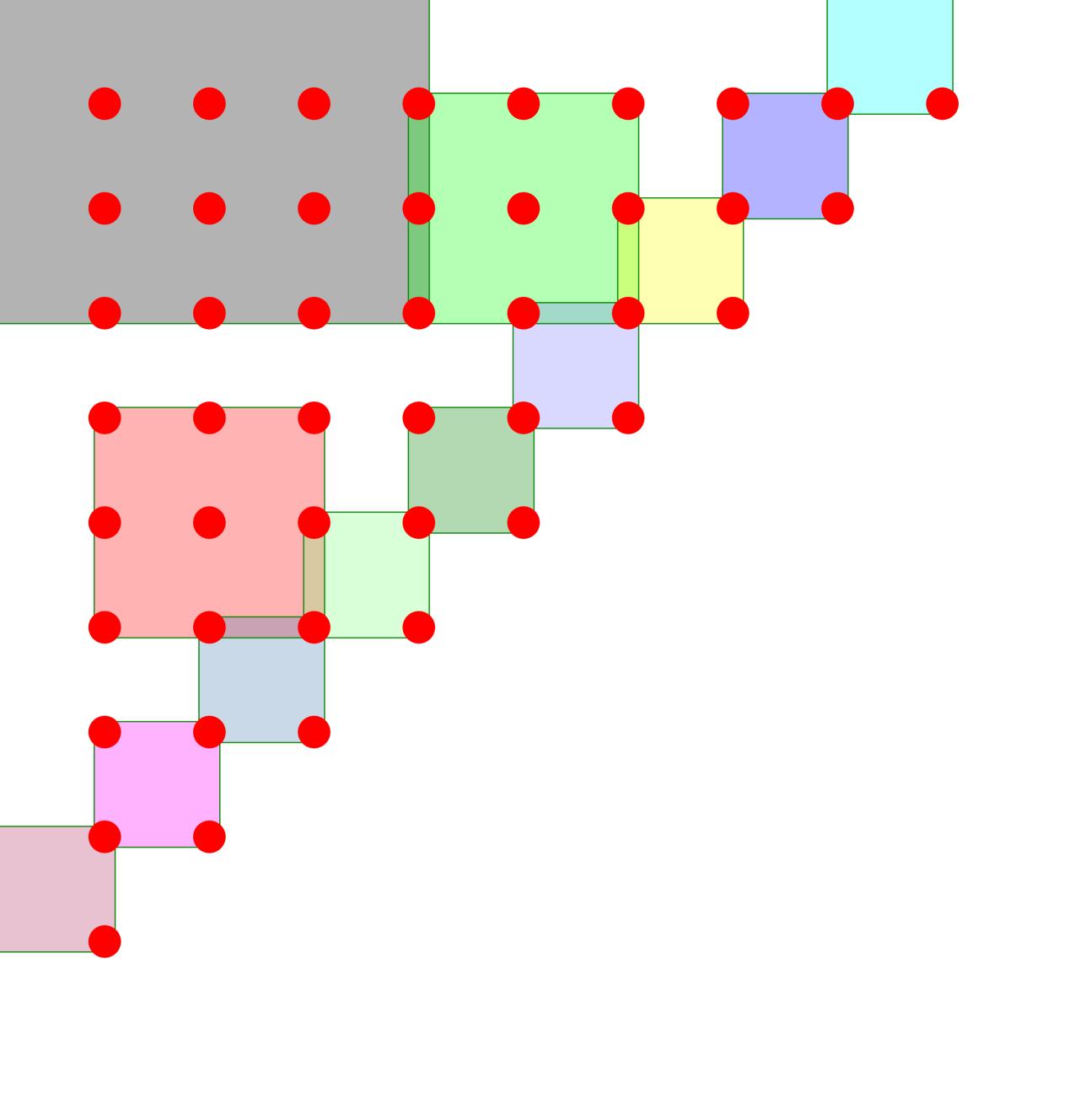
```
WSPD cover
n = 10
ε = 1
N = 45 (# of grid points)
|WSPD| = 15
```



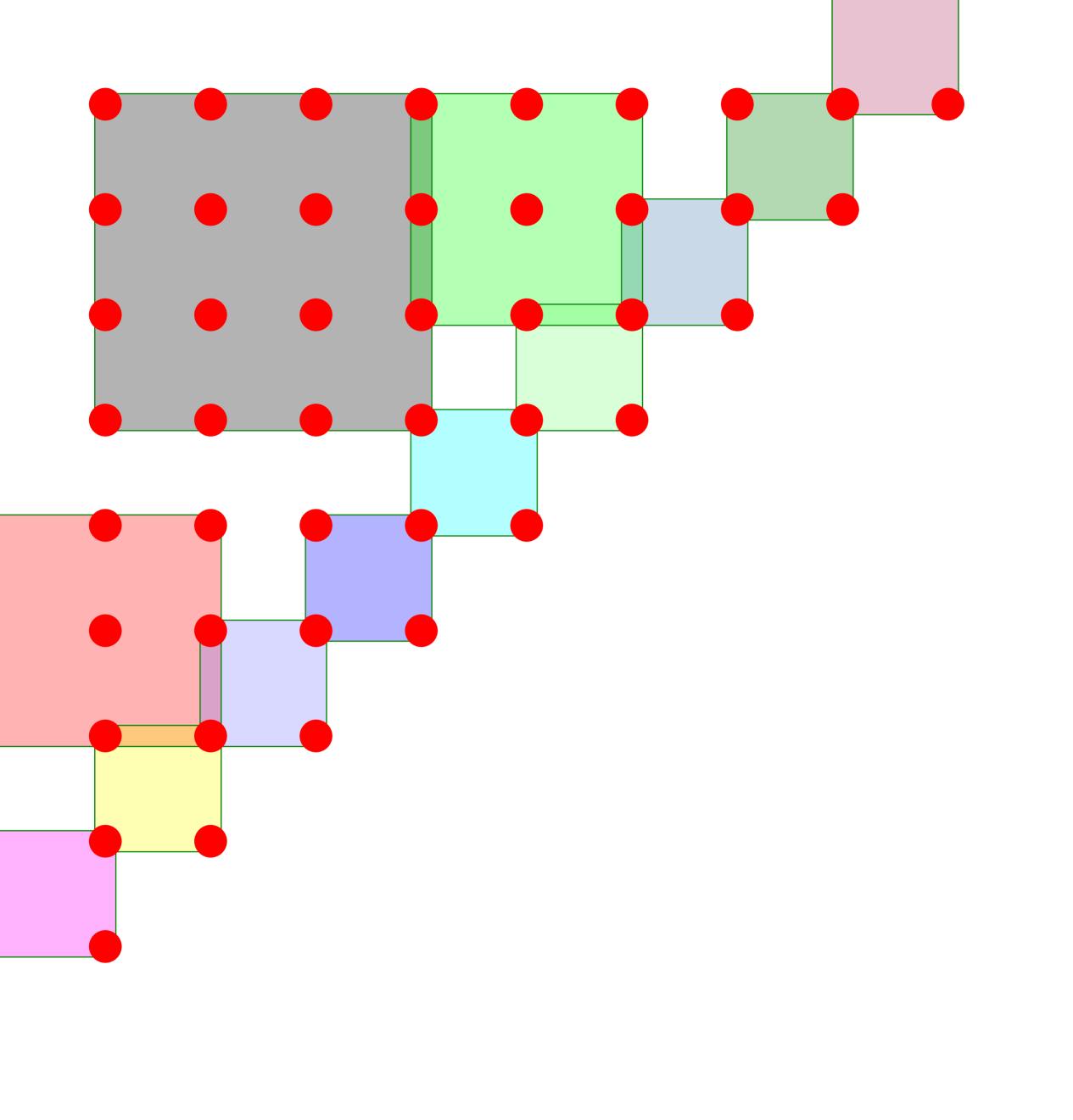
3 approx cover n = 10 |3-approx| = 14



3 approx cover (clean)
n = 10
|3-approx-clean| = 12
Cleaning is done using greedy cover on the 3-approx solution computed.

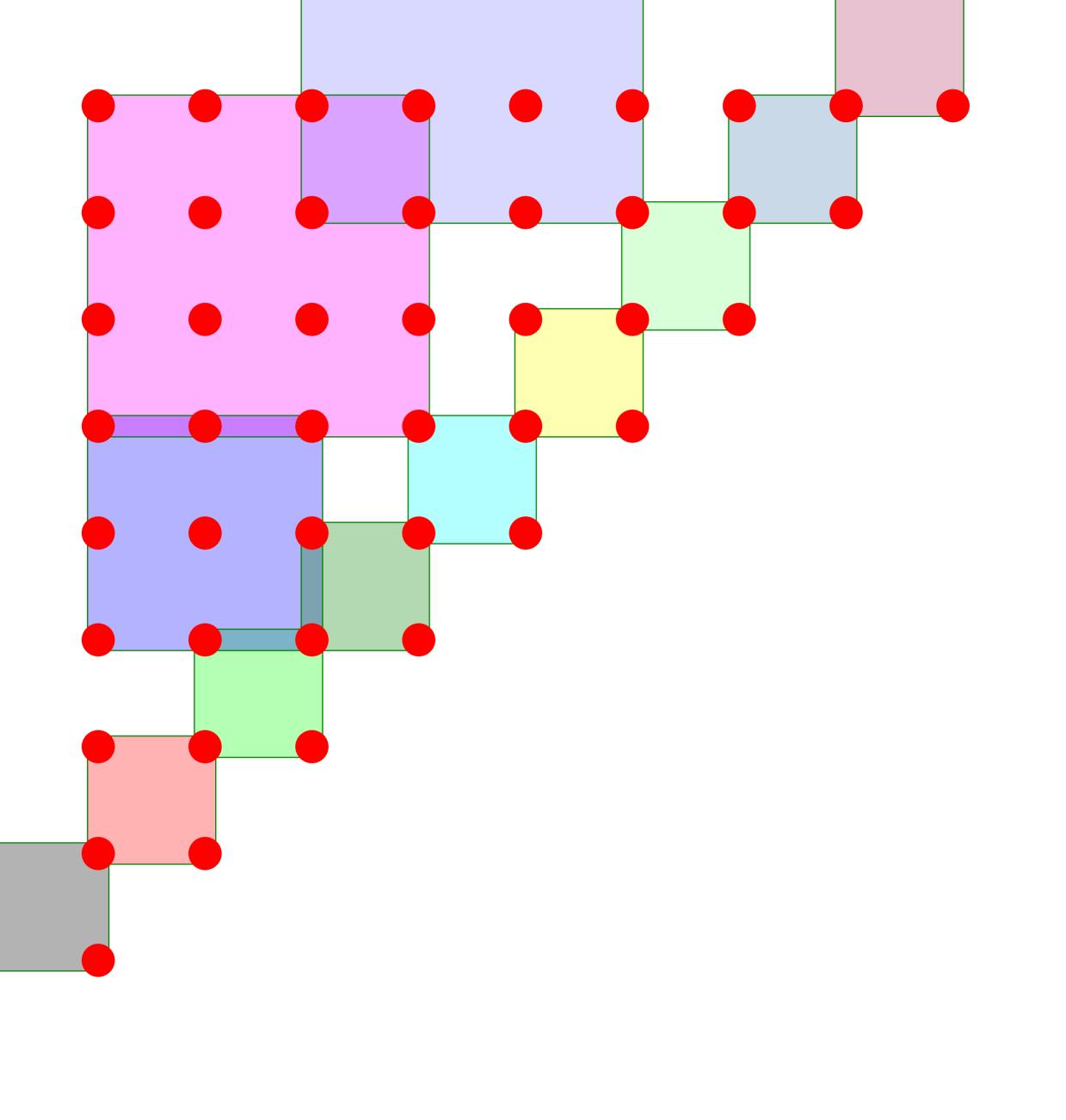


Greedy cover n = 10 $\epsilon = 1$ |Greedy| = 12 Solution computed by setting up the set system, and using greedy set-cover to solve it.



IP cover
n = 10
ε = 1
|IP| = 12

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



```
Summary
n = 10 (N=45)
ε = 1
|IP| = 12
|Greedy| = 12
|WSPD| = 15
|3-aprx| = 14
|3-aprx-c| = 12
```