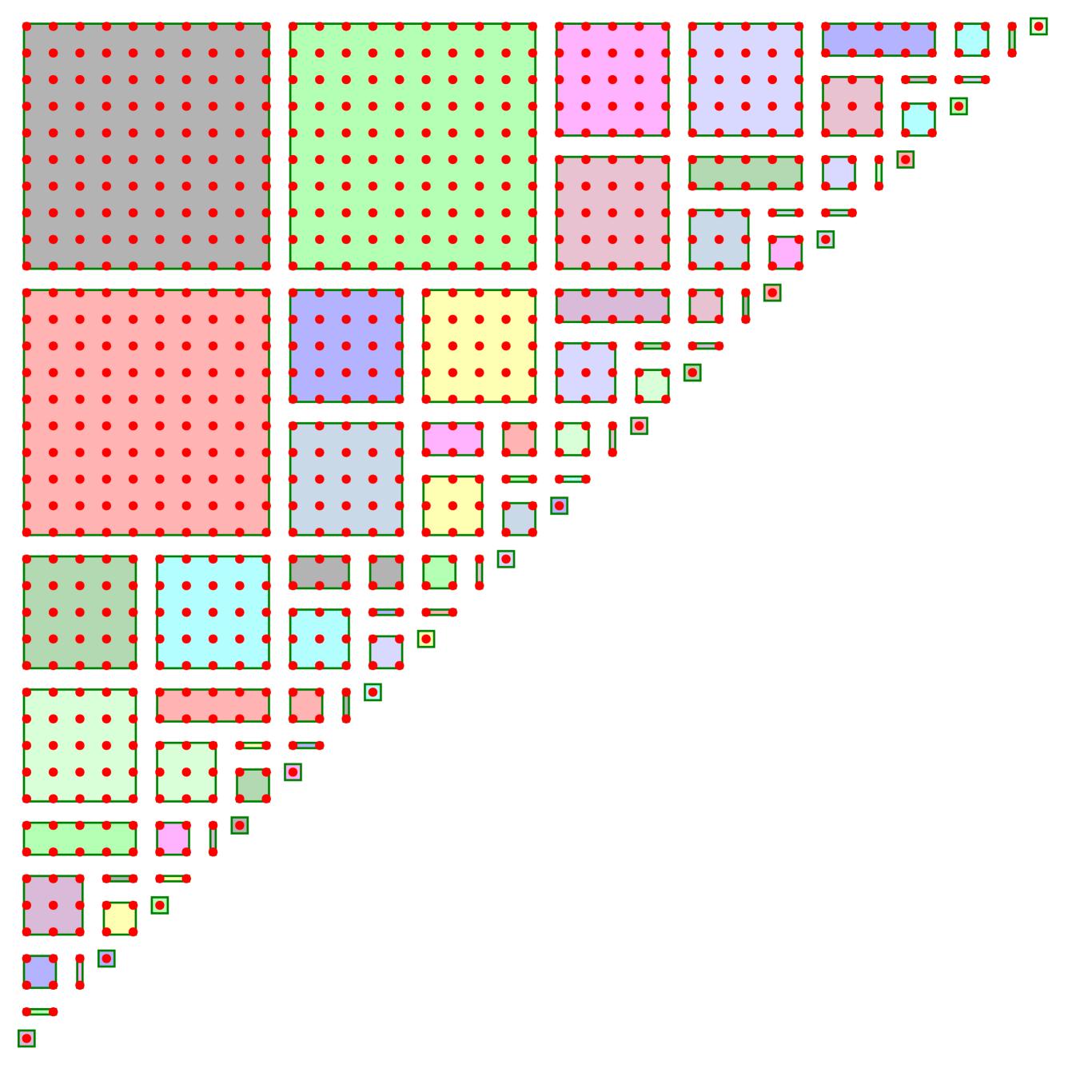
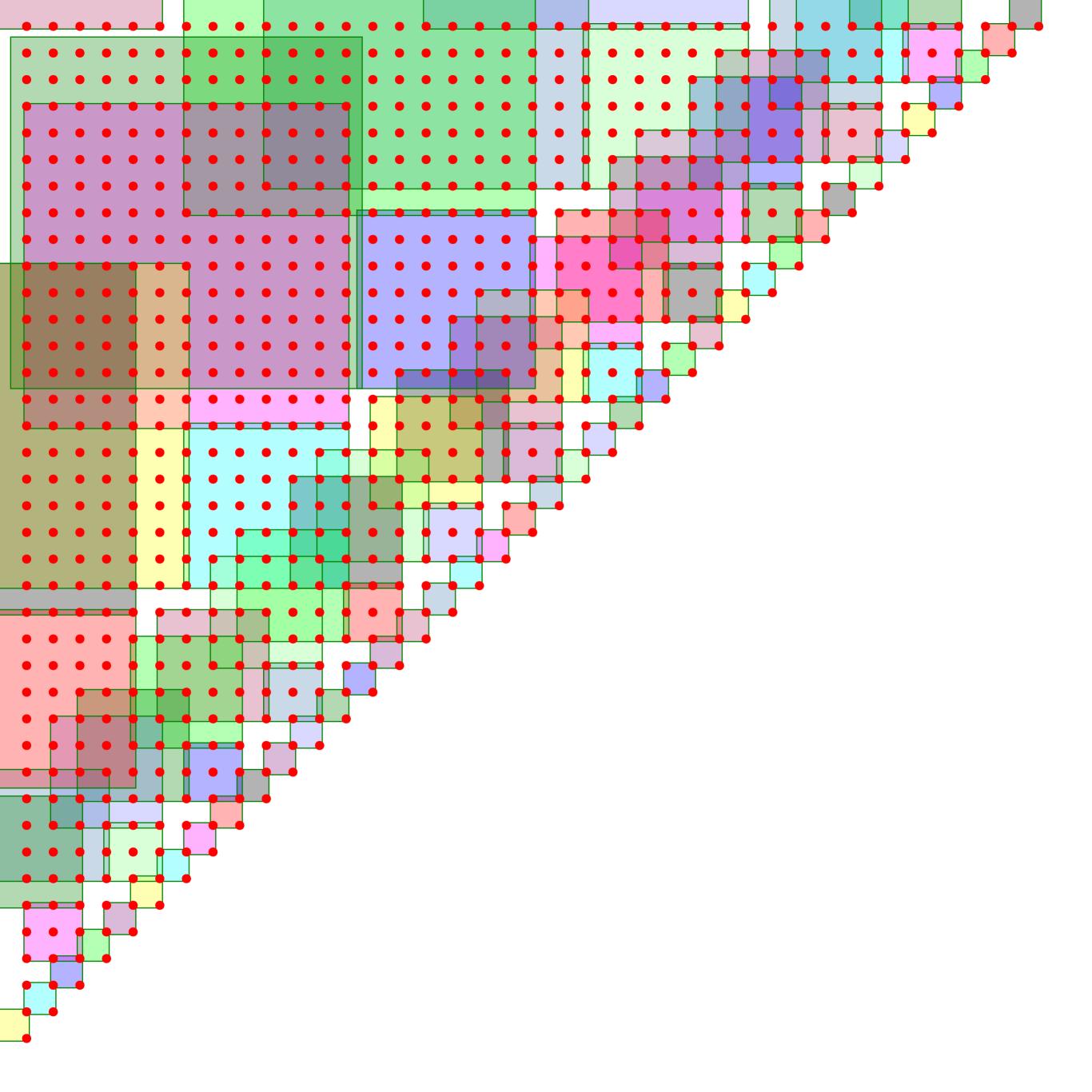
```
WSPD cover
n = 40
ε = 1
N = 780 (# of grid points)
|WSPD| = 82
```

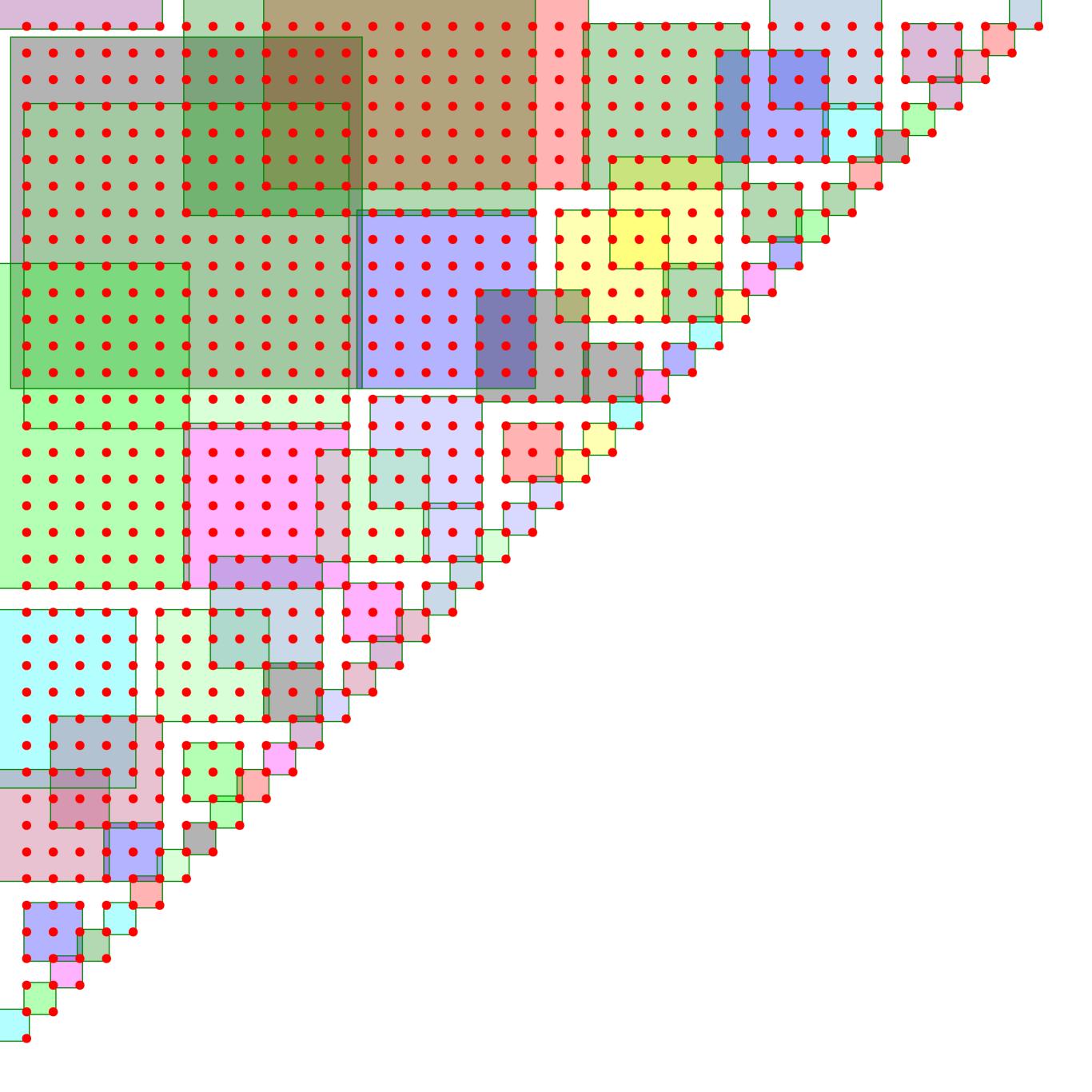


3 approx covern = 40|3-approx| = 86

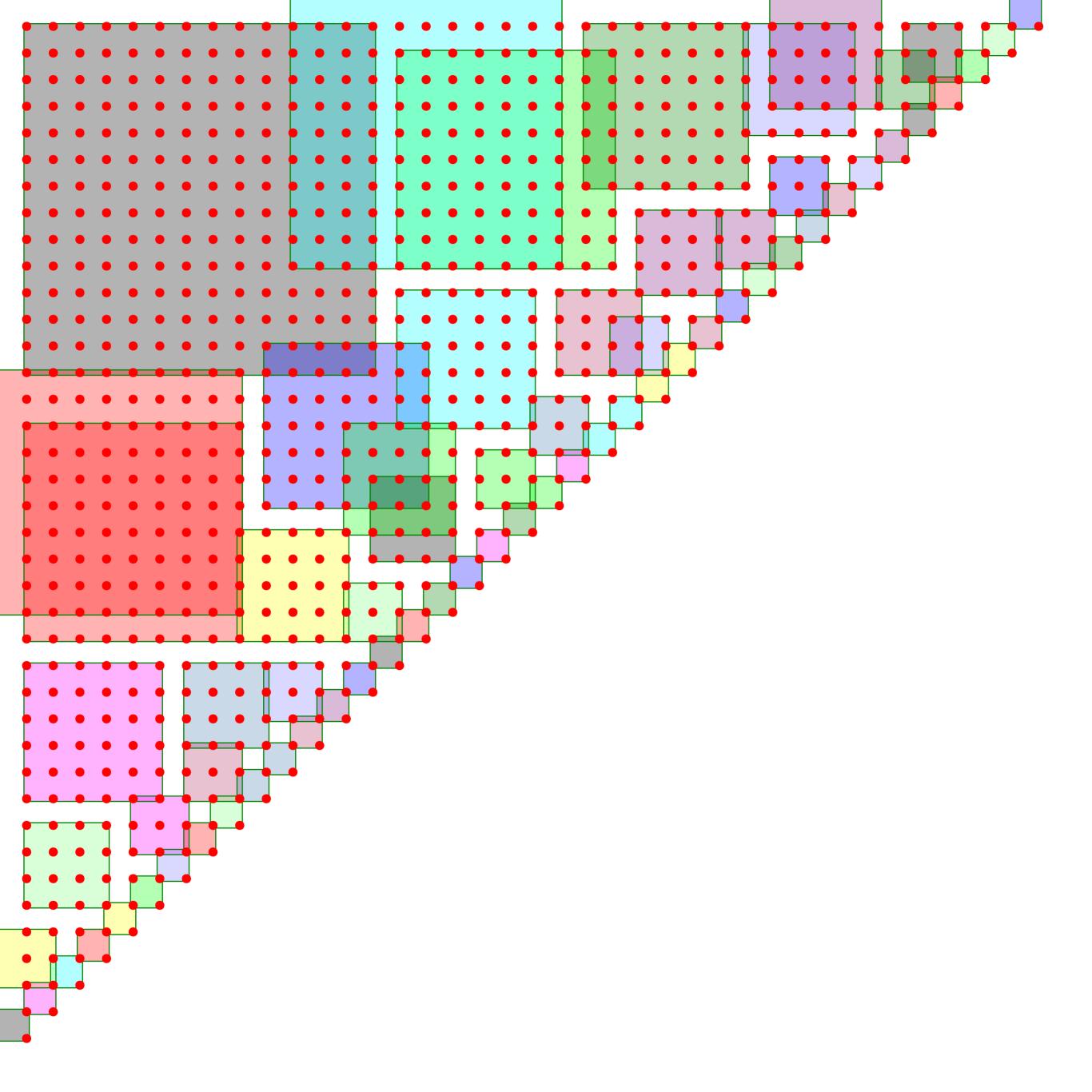


3 approx cover (clean)
 n = 40
 |3-approx-clean| = 72

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

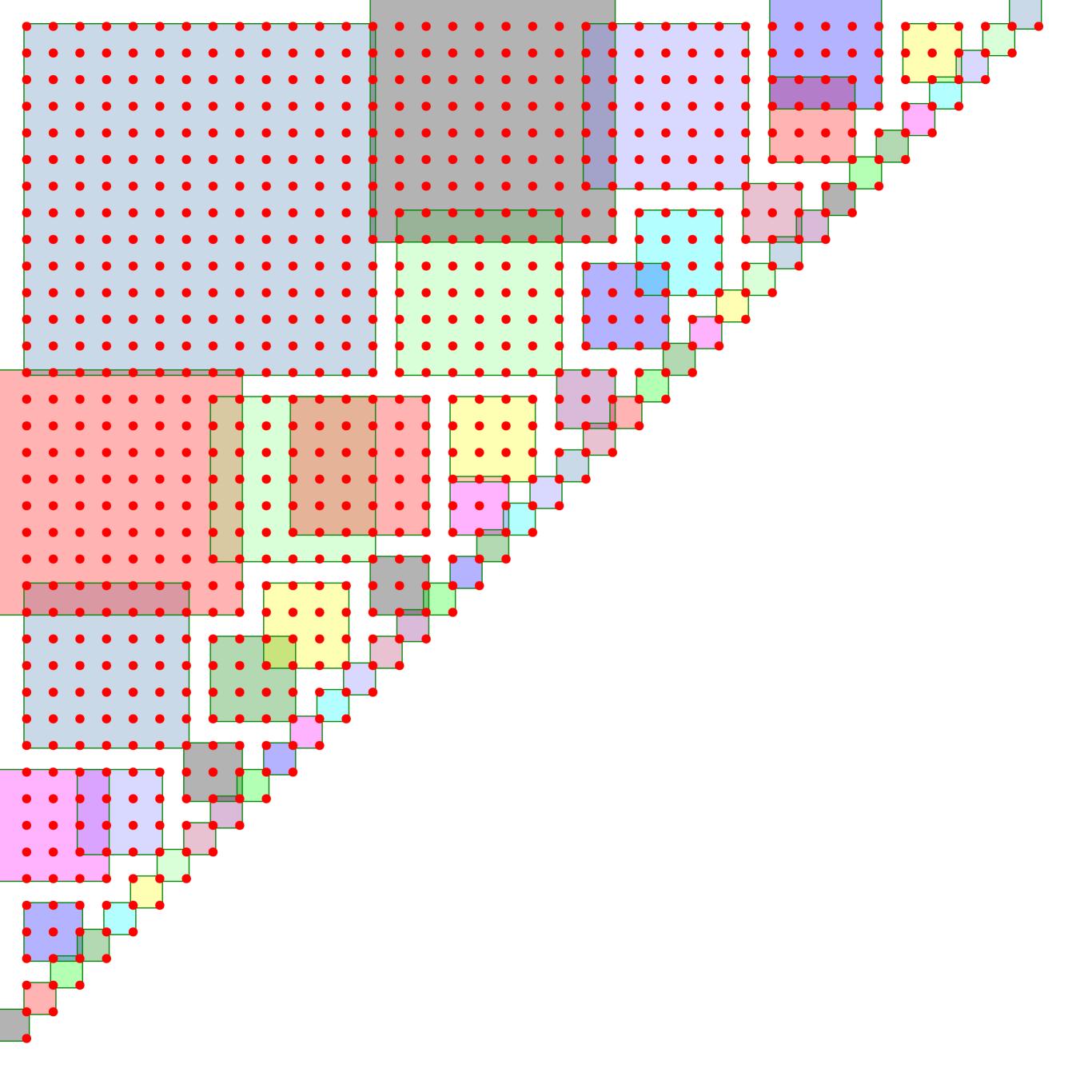


Greedy cover n = 40  $\epsilon = 1$  |Greedy| = 69 Solution computed by setting up the set system, and using greedy set-cover to solve it.



IP cover
n = 40
ε = 1
|IP| = 63

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



```
Summary
n = 40 (N=780)
\(\epsilon = 1\)
|IP| = 63
|Greedy| = 69
|WSPD| = 82
|3-aprx| = 86
|3-aprx-c| = 72
```