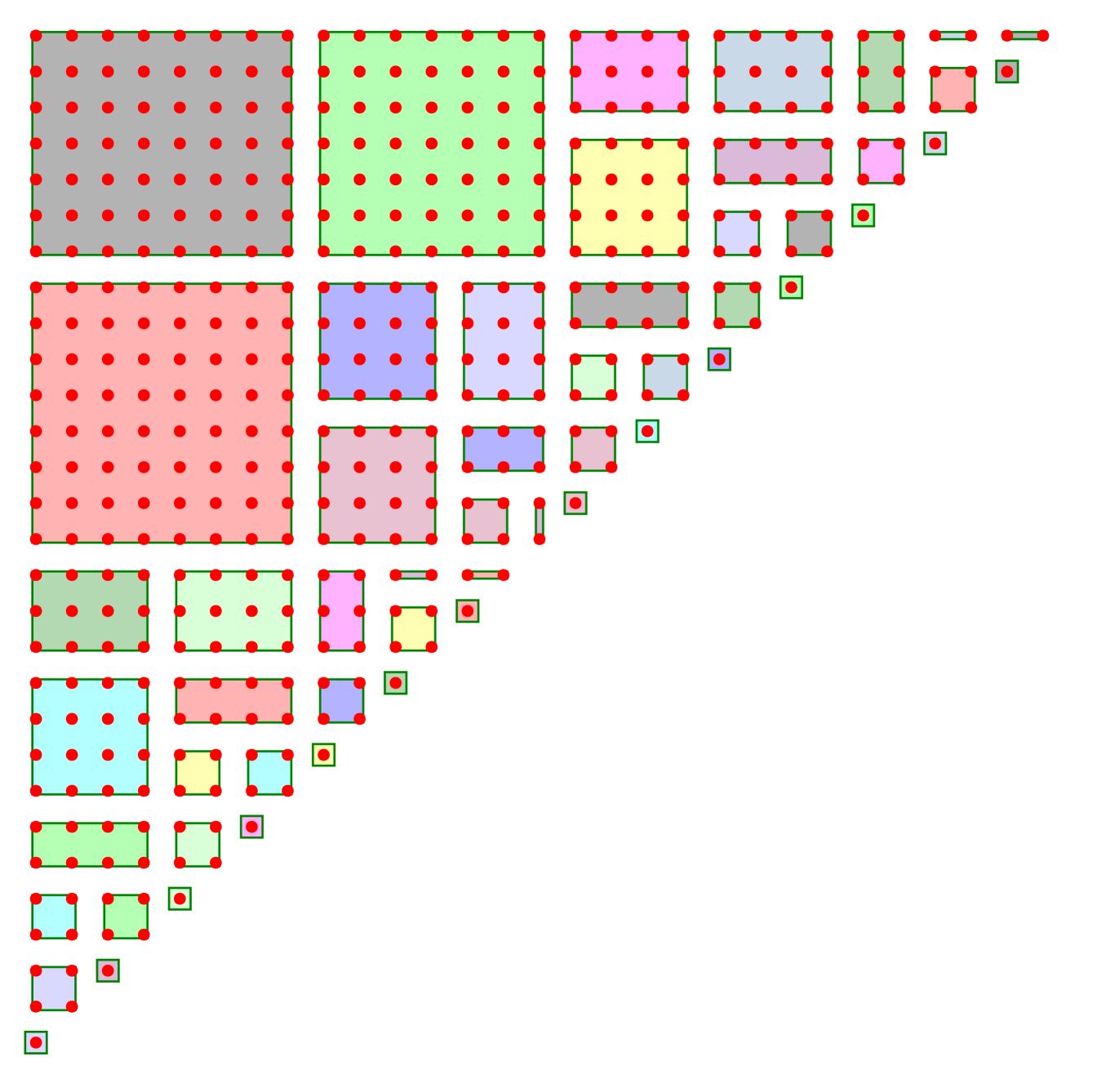
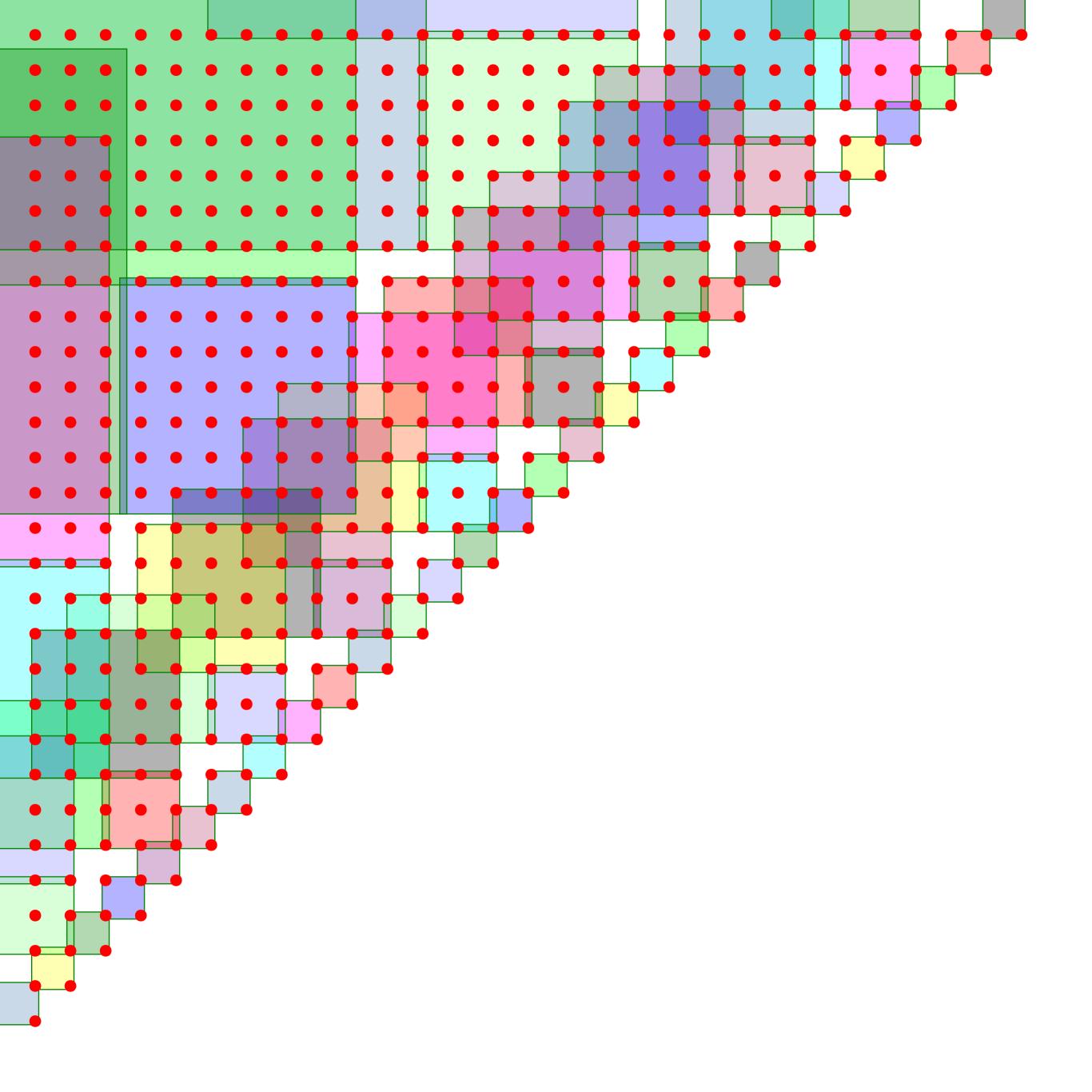
```
WSPD cover
n = 30
ε = 1
N = 435 (# of grid points)
|WSPD| = 55
```

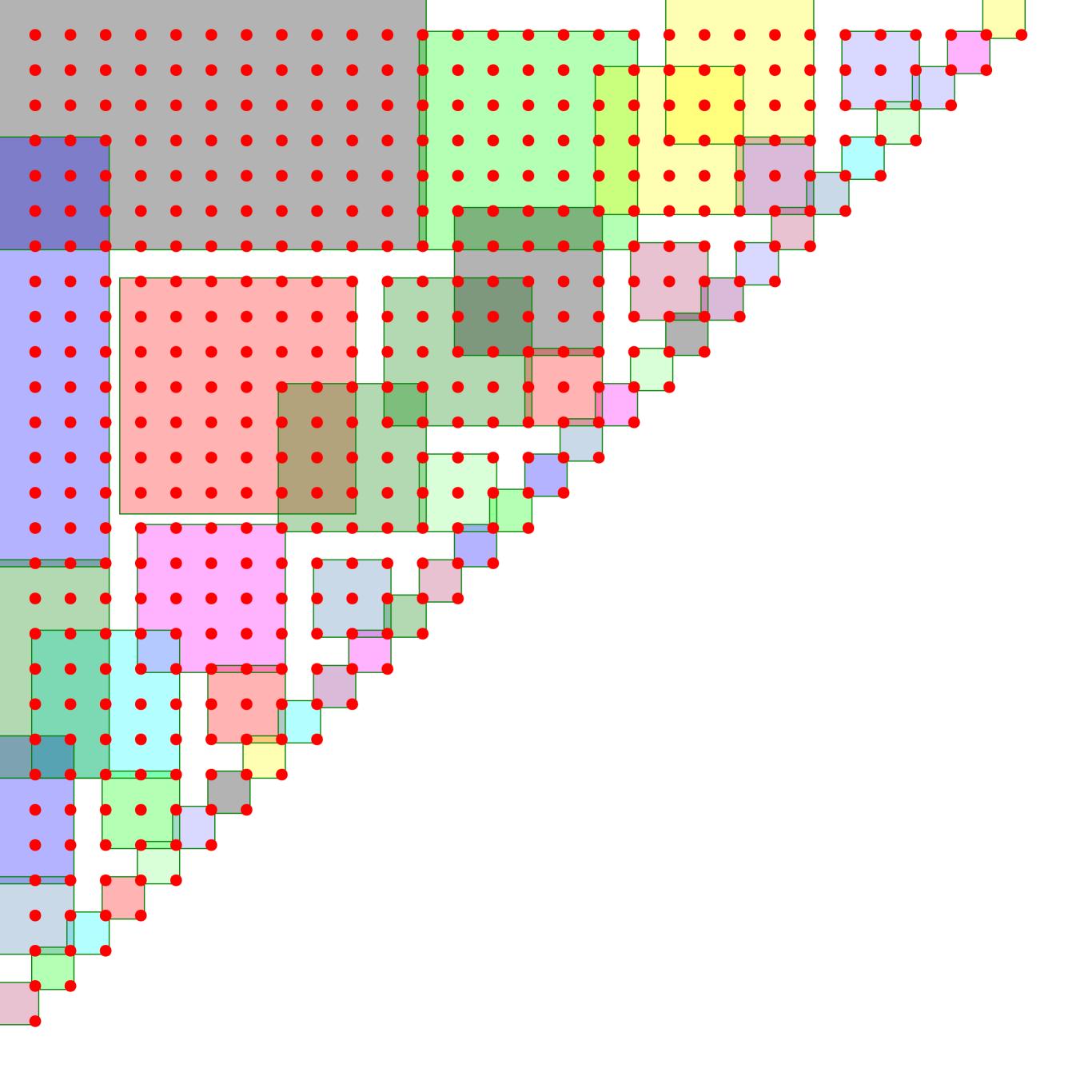


3 approx cover
n = 30
|3-approx| = 63

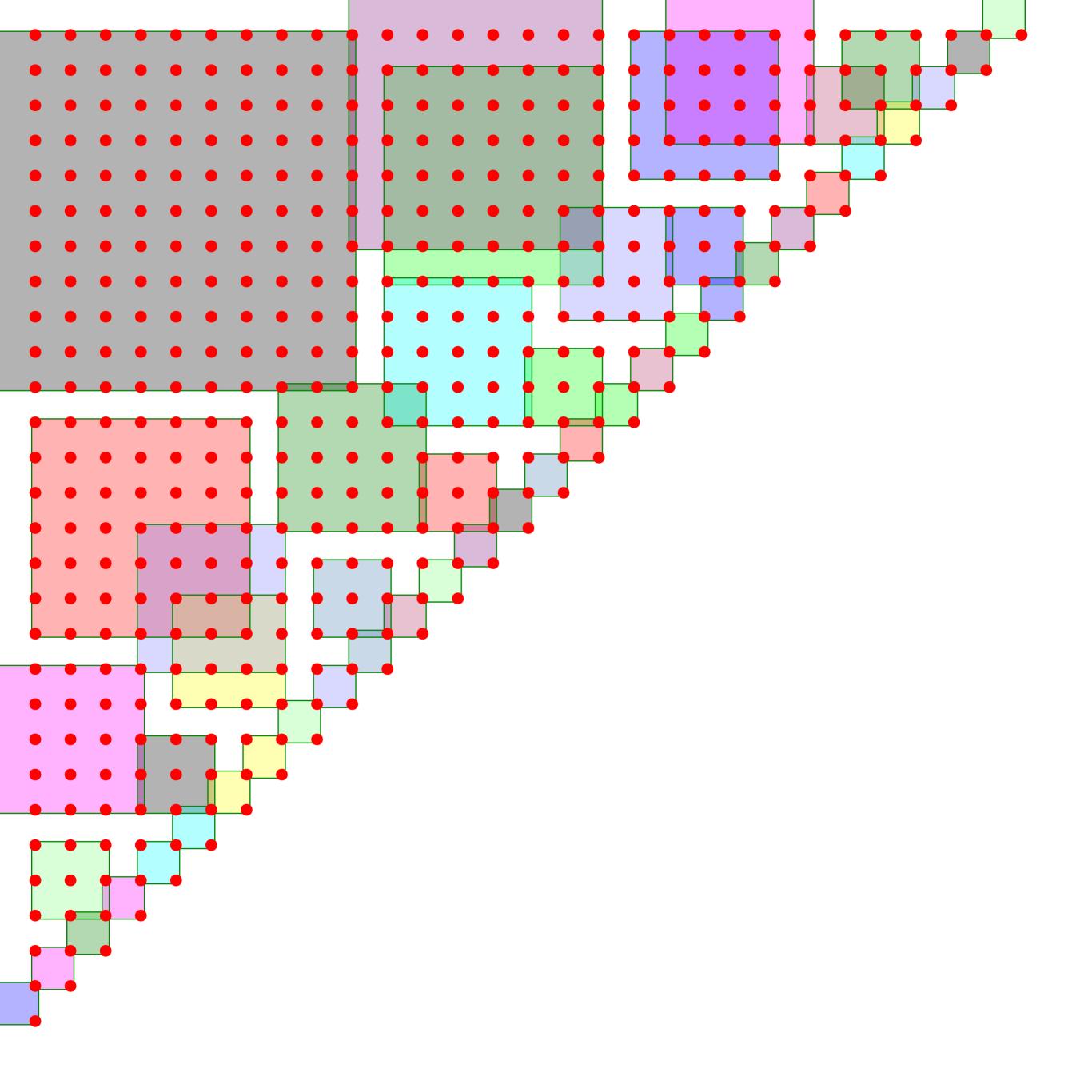


3 approx cover (clean)
n = 30
|3-approx-clean| = 51
Cleaning is done using greedy cover on the 3-approx

solution computed.

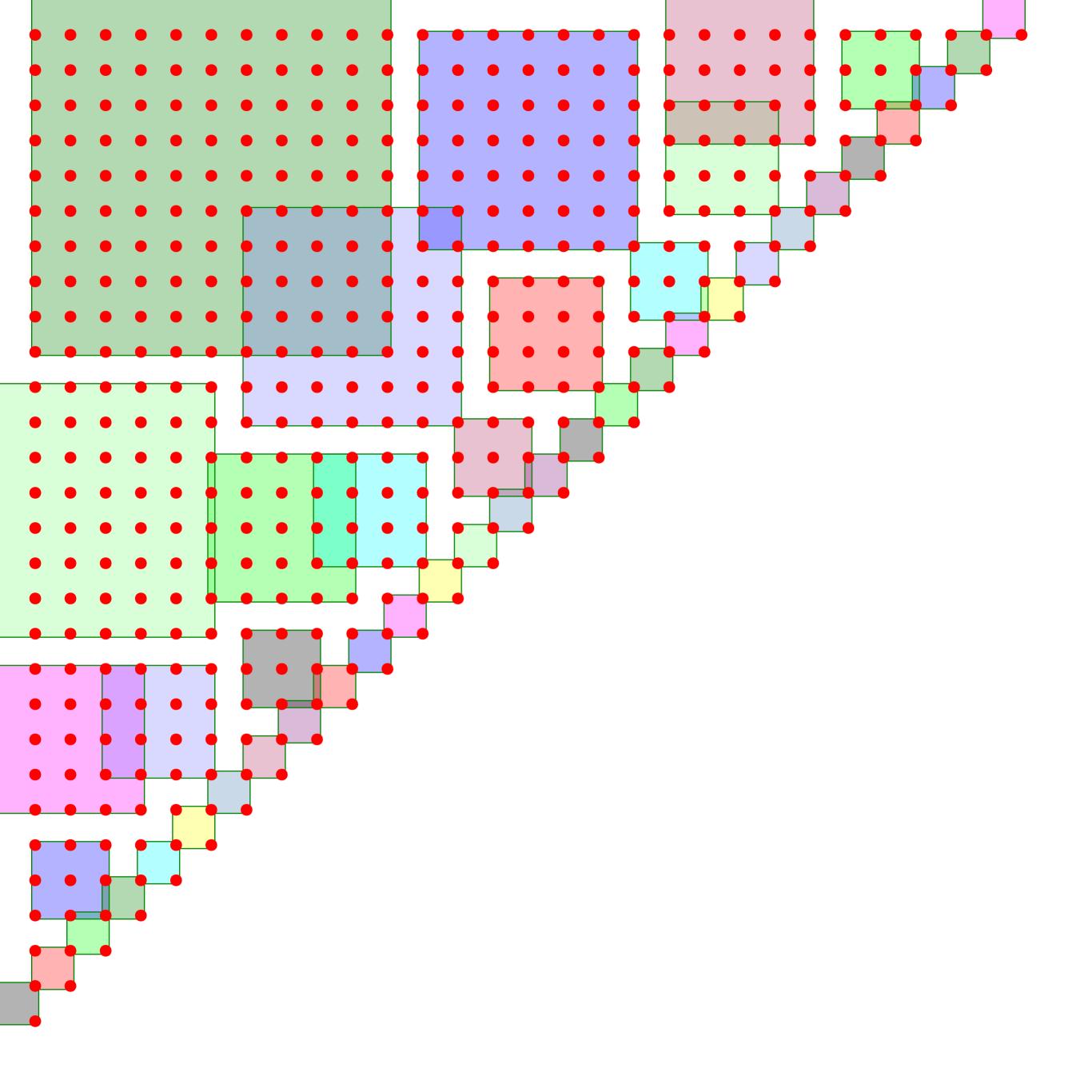


Greedy cover n = 30 $\epsilon = 1$ |Greedy| = 49 Solution computed by setting up the set system, and using greedy set-cover to solve it.



IP cover
n = 30
ε = 1
|IP| = 45

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



```
Summary
n = 30 (N=435)

\varepsilon = 1
|IP| = 45
|Greedy| = 49
|WSPD| = 55
|3-aprx| = 63
|3-aprx-c| = 51
```