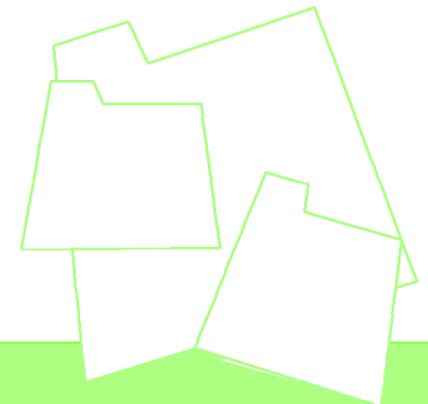


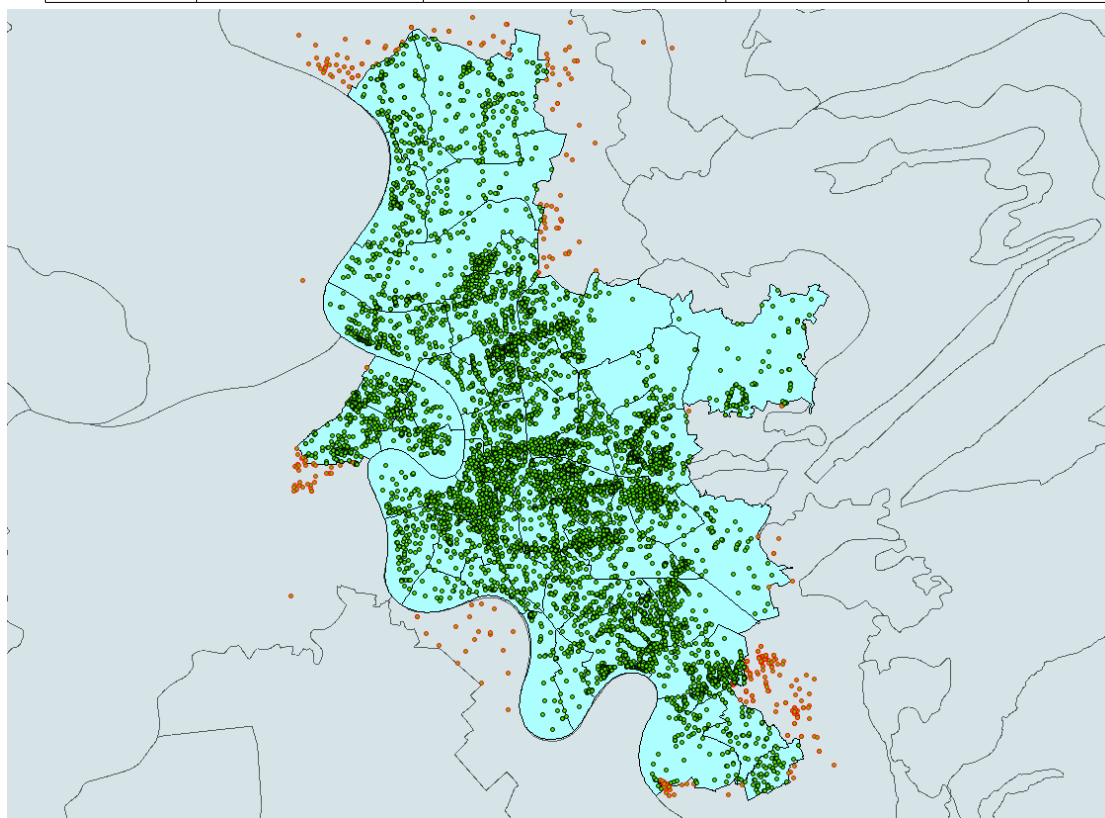
Geoprocessing mit PostgreSQL/PostGIS

Anwendungsfälle

5. Oktober 2010

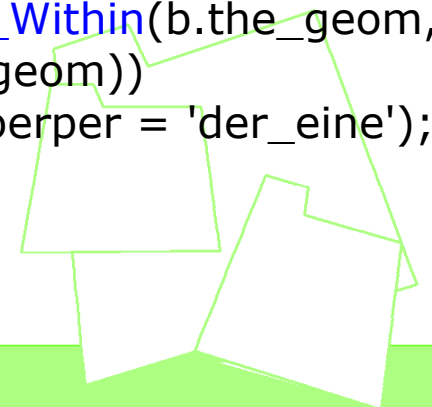


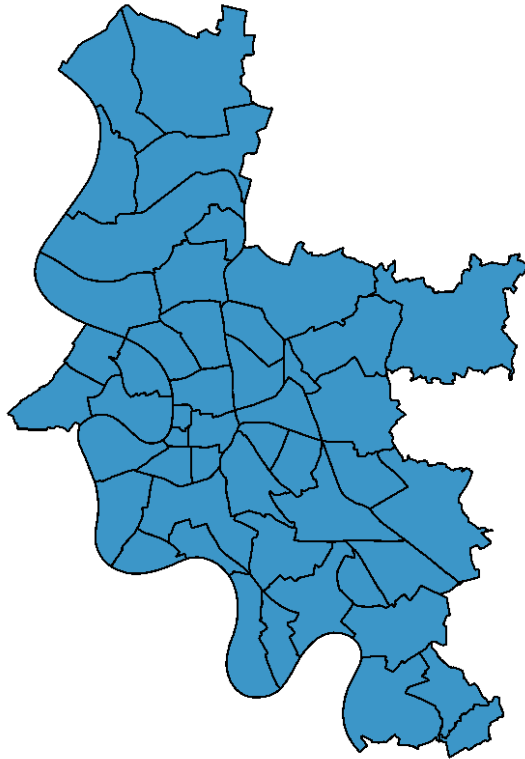
id	bnr	x	y	in_town	körper
1	DU108	2549610	5689758	false	99_11
2	100444	2552658.92	5678722.62	true	89_12
...



```
UPDATE messstellen c SET in_dssd = TRUE
WHERE
  (SELECT ST_Within(a.the_geom,
    ST_Union(b.the_geom))
  FROM messstellen a, die_stadt b
  GROUP BY a.gid, a.the_geom
  HAVING c.gid = a.gid );
```

```
UPDATE messstellen b SET tkoerper =
  (SELECT tkoerper FROM gwkoerper a
  WHERE
    (SELECT ST_Within(b.the_geom,
      a.the_geom))
    AND a.tkoerper = 'der_eine');
```





```
SELECT COUNT(*) FROM stadtteile;
```

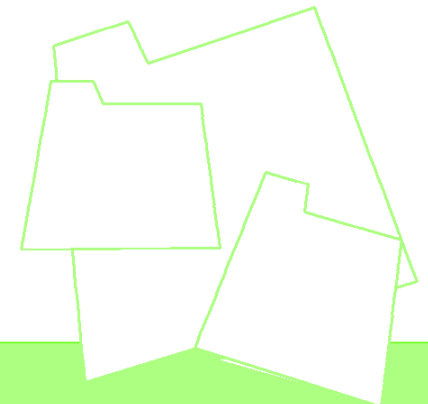
Ergebnis: 49

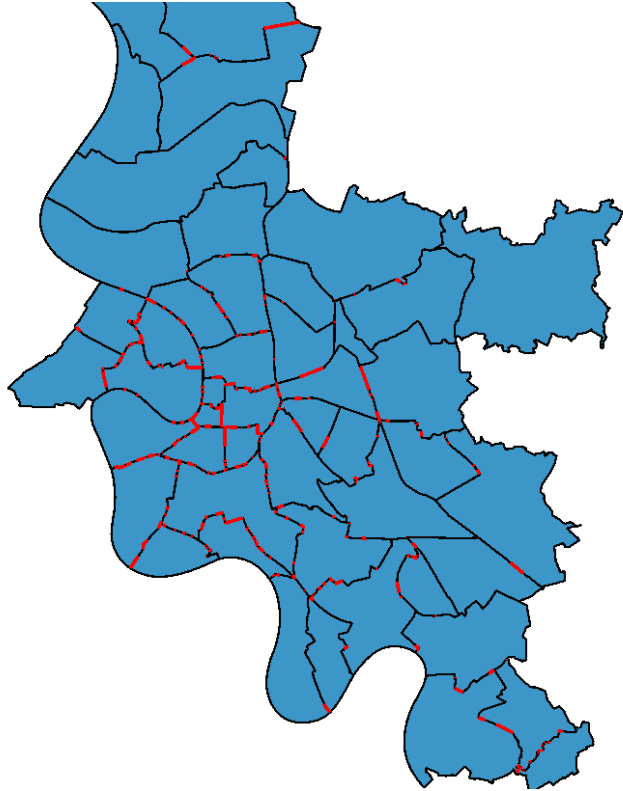
```
SELECT COUNT(*) FROM
  (SELECT (ST_Dump(the_geom)).geom
   FROM stadtteile);
```

Ergebnis: 375

```
SELECT COUNT(*) FROM
  (SELECT (ST_DumpRings(foo.the_geom)).*
   FROM
     (SELECT ST_Union(the_geom)
      FROM stadtteile) AS foo
   ) AS dumprings
 WHERE dumprings.path[1] > 0;
```

Ergebnis: 342





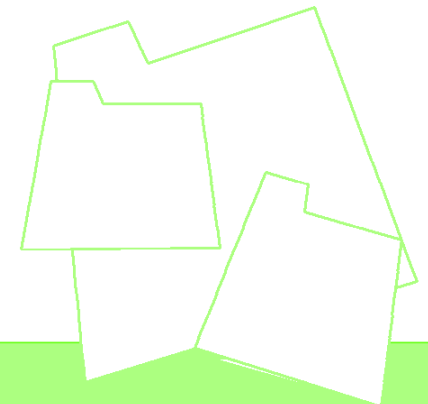
375 Flächen

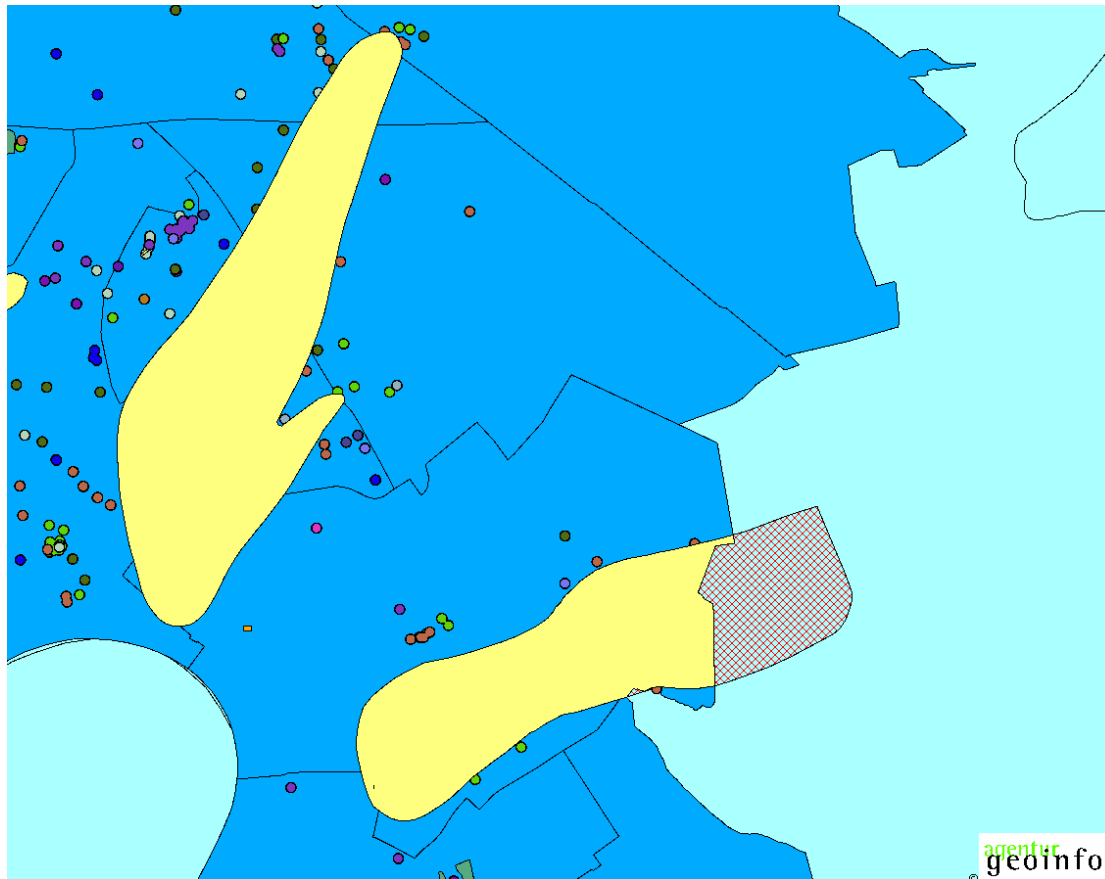
+

342 Löcher

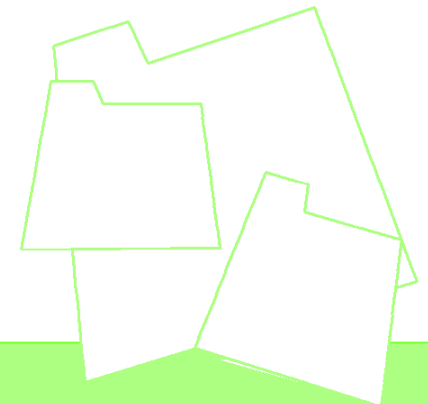
≠

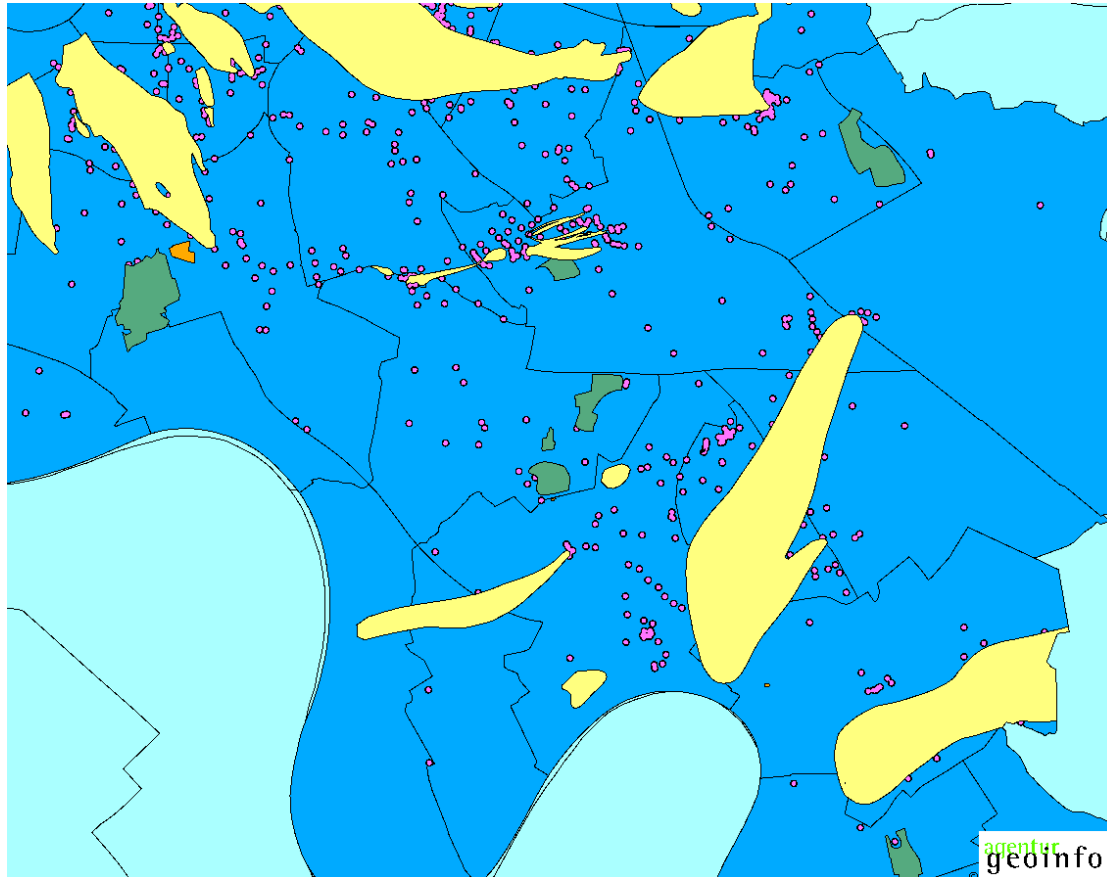
49 Stadtteile





```
UPDATE die_box SET the_geom =
(SELECT
  ST_Multi(
    ST_Intersection(
      ST_Union(a.the_geom),
      ST_Union(b.the_geom)
    )
  )
FROM stadtteile a, gw_fahnen b
GROUP BY b.the_geom
)
;
```

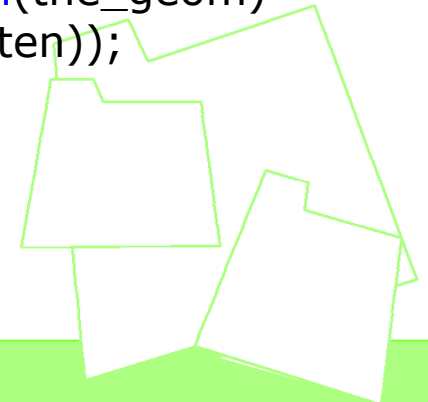




```
INSERT INTO die_box
    (stoffgruppe, stoffkuerzel, the_geom)
VALUES ('0', 'alle_BNR_Wolken',
    (SELECT ST_Union(the_geom)
    FROM die_box
    WHERE stoffgruppe::int > 0));
```

```
INSERT INTO die_box
    (stoffgruppe, stoffkuerzel, the_geom)
VALUES ('0', 'alle_Fahnen',
    (SELECT ST_Union(the_geom)
    FROM gw_fahnen));
```

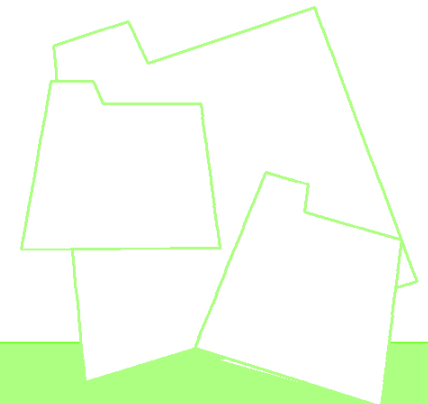
```
INSERT INTO die_box
    (stoffgruppe, stoffkuerzel, the_geom)
VALUES ('0', 'alle_as',
    (SELECT ST_Union(the_geom)
    FROM as_atlasten));
```

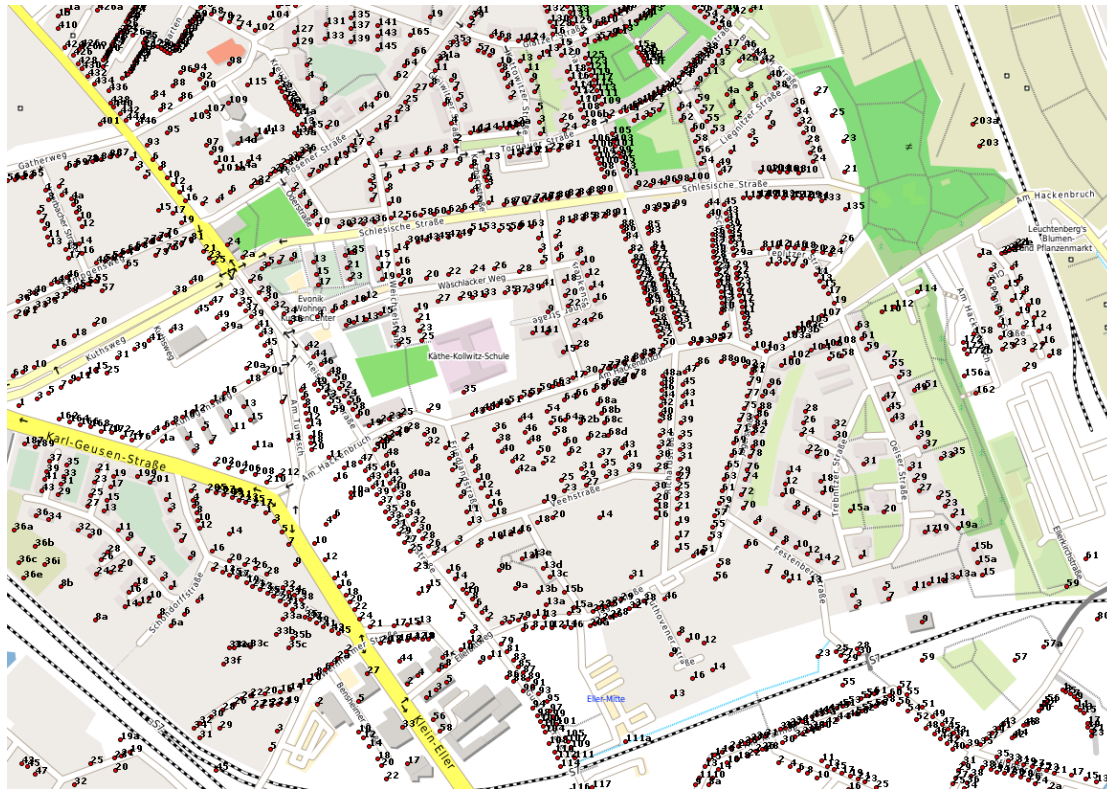




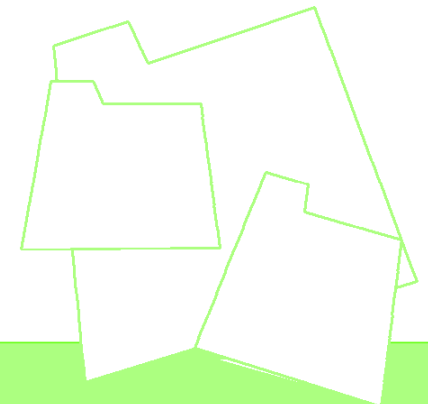
```
SELECT ROUND(
    (ST_Area(the_geom) / 1000000
)::numeric, 2
) || ' km' || chr(178)
FROM die_box
WHERE stoffkuerzel = 'alles'
;
```

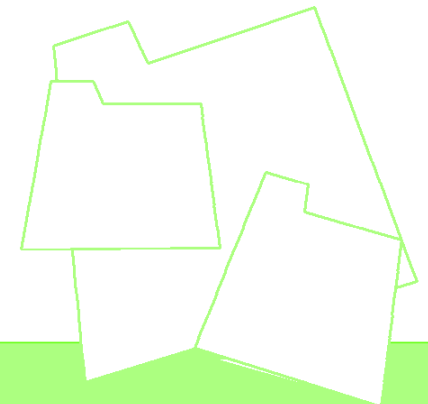
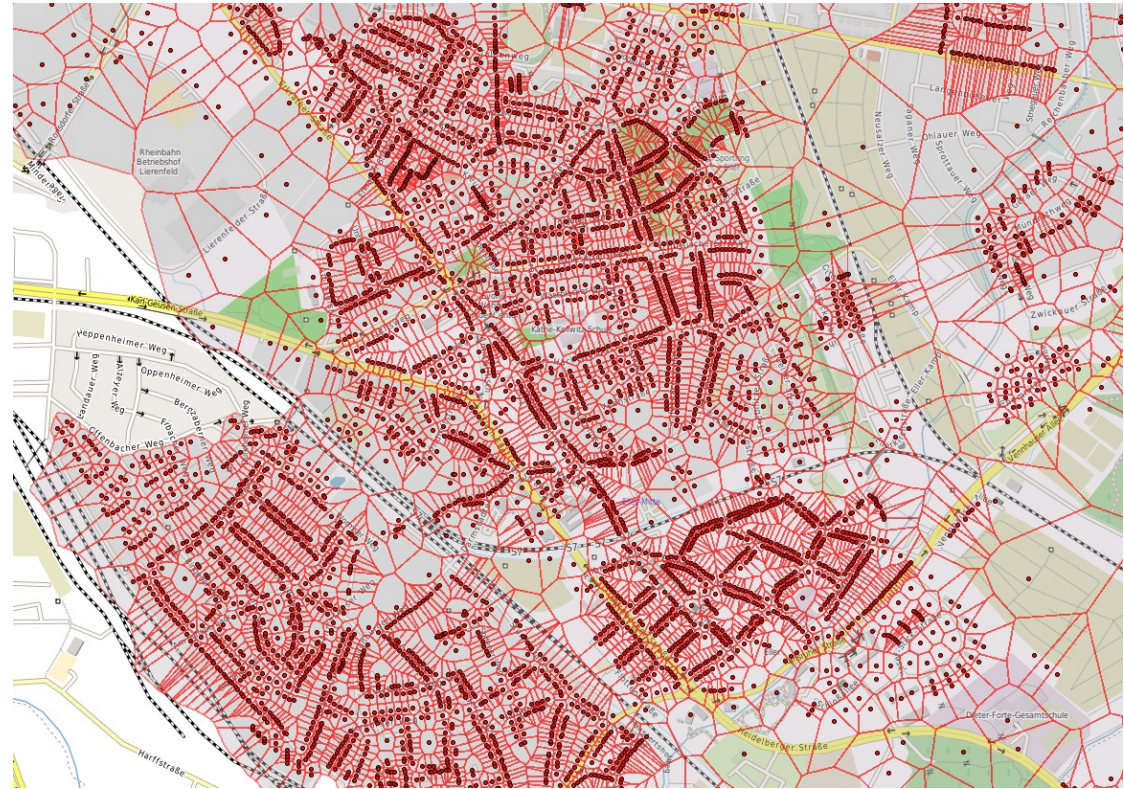
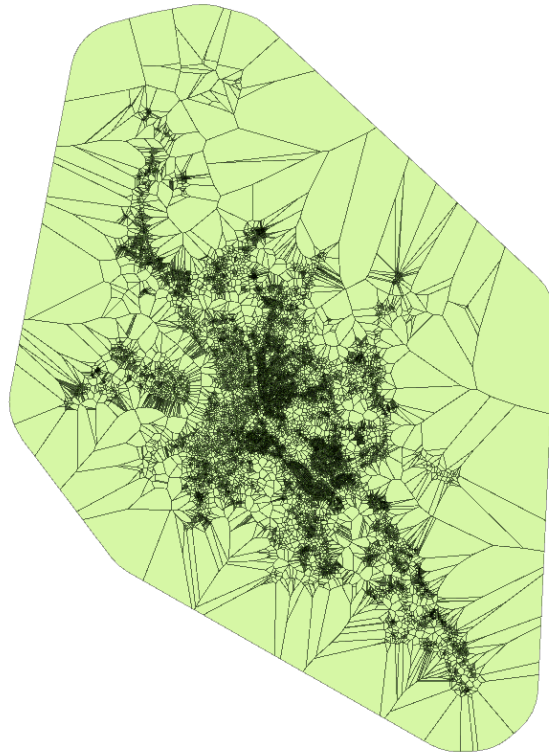
Ergebnis: xyz,xx km²

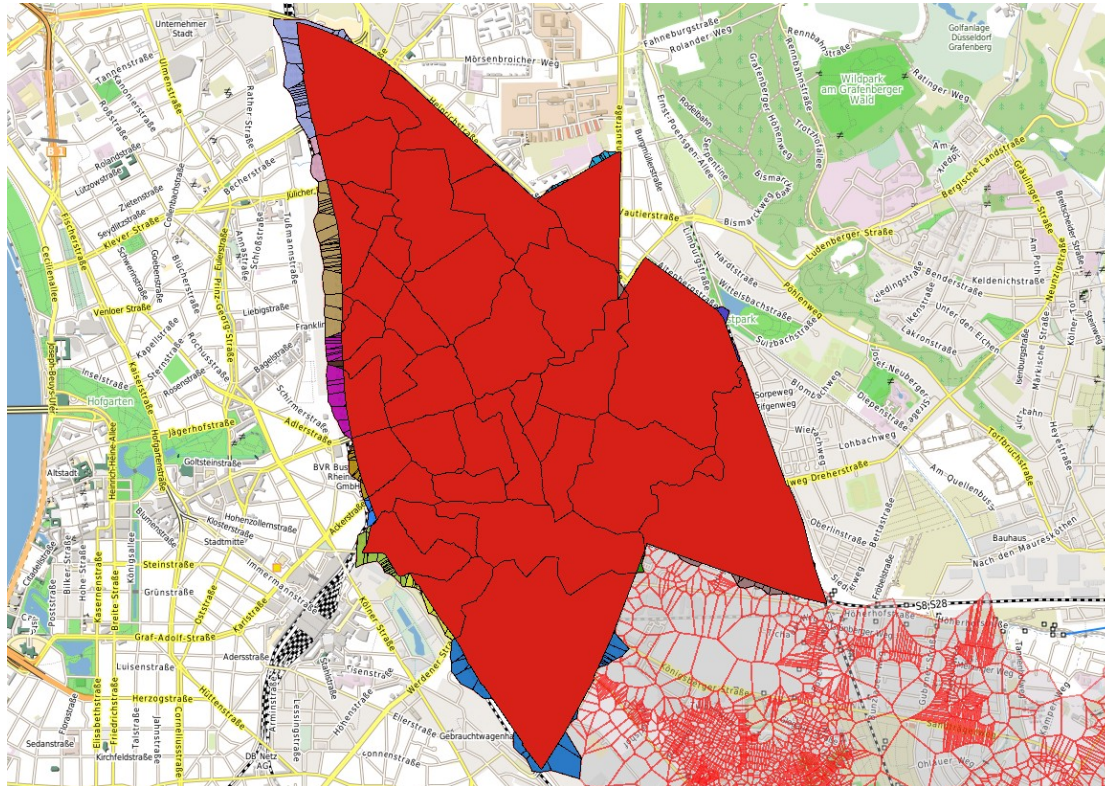




```
INSERT INTO adressen_voronoi(gid, the_geom)
(SELECT id, polygon
FROM voronoi
(
'(SELECT gid, the_geom FROM adressen
WHERE attribut LIKE "%abc%"
)AS subselect',
'subselect.the_geom', 'subselect.gid'
) JOIN adressen ON (id = gid)
);
```



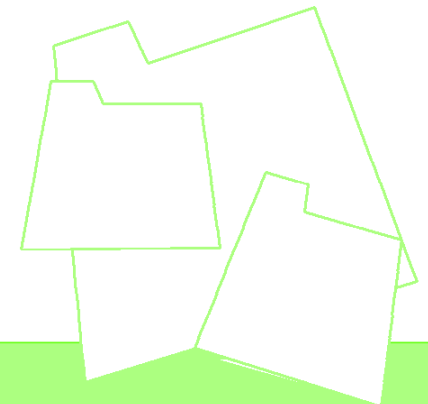


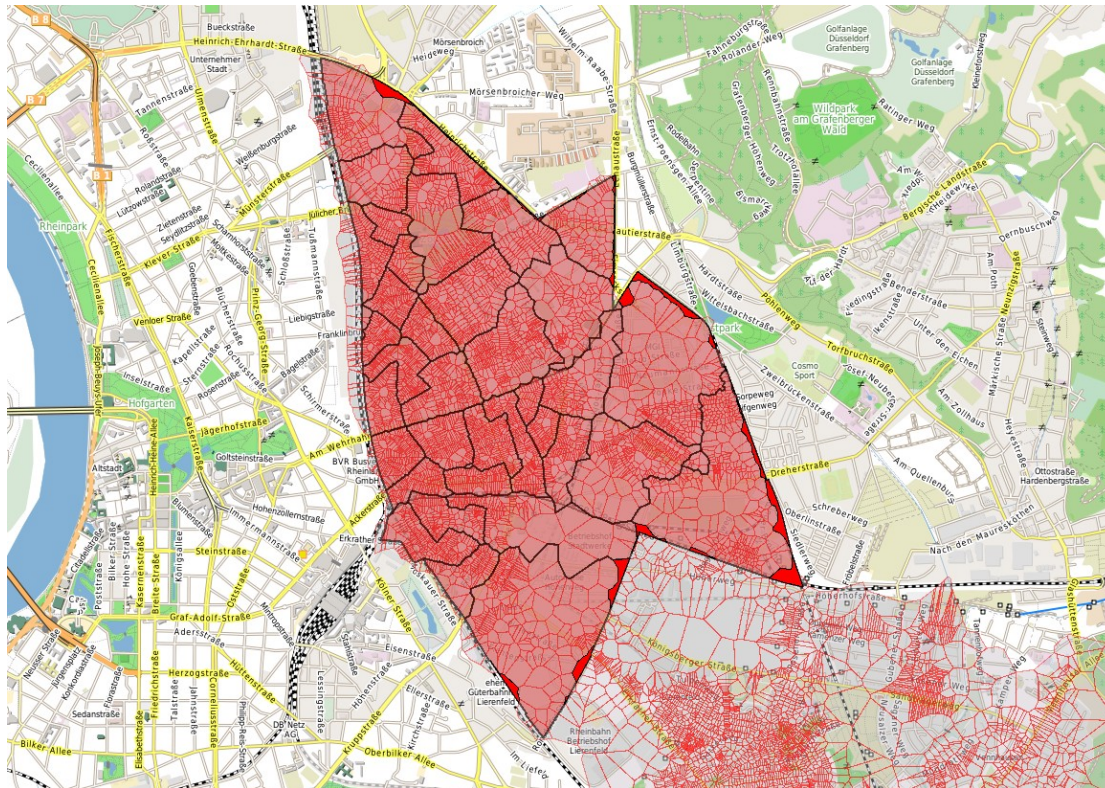


```

UPDATE stimmbezirke c SET
  the_geom = foo.the_geom
FROM (
  SELECT a.gid, ST_Multi(
    ST_Intersection(a.the_geom,
    ST_Union(b.the_geom)
  ) AS the_geom
  FROM stimmbezirke a,
  bezirk_fossgis_2010 b
  GROUP BY a.the_geom, a.gid
) foo
WHERE c.gid = foo.gid
;

```

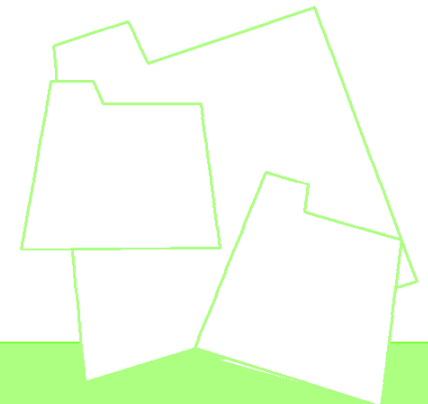


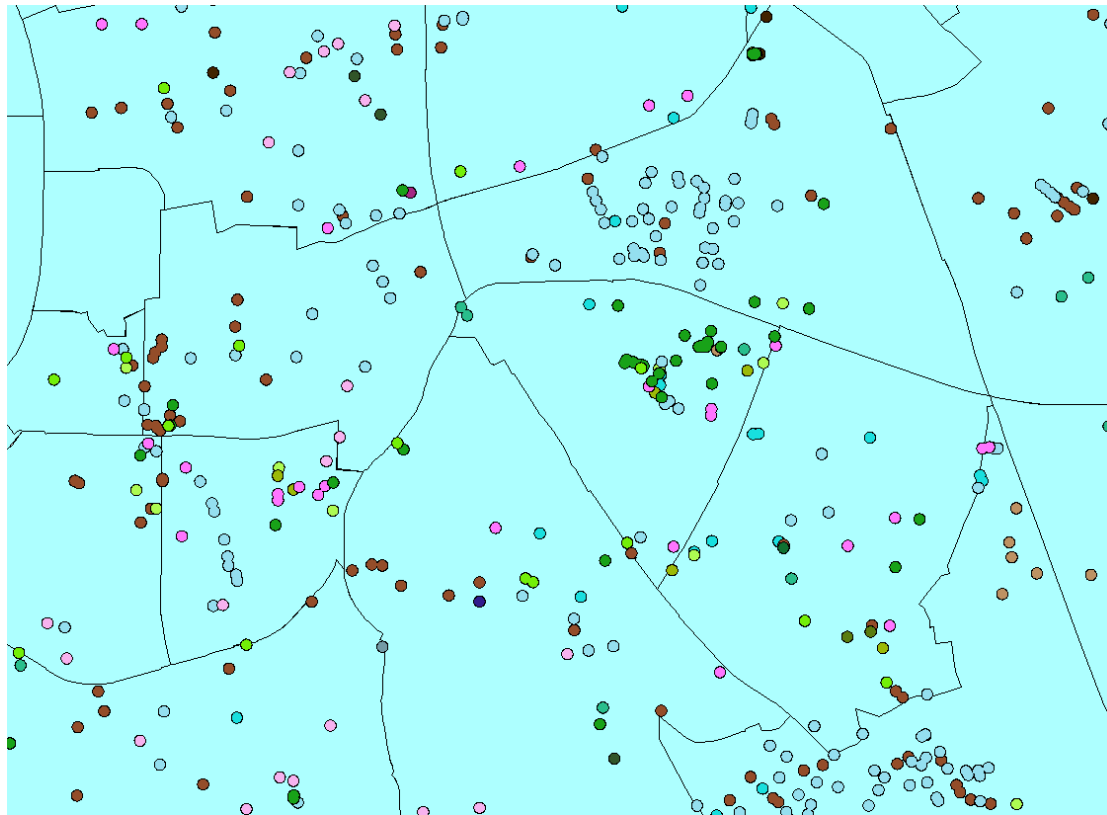


```

INSERT INTO enklave (stadtbezirk, the_geom)
(SELECT b.stadtbezirk,
  ST_Difference(
    ST_Union(b.the_geom),
    ST_Union(a.the_geom)
  ) AS the_geom
FROM stimmbezirke a,
  bezirk_fossgis_2010 b
GROUP BY b.stadtbezirk
);

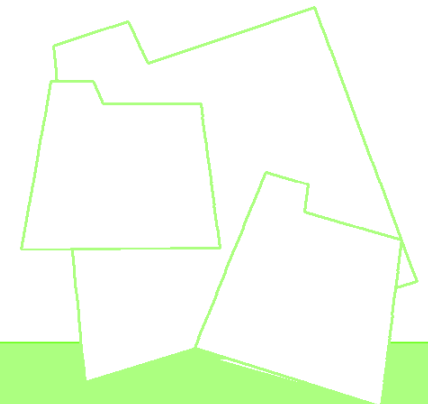
```





```
INSERT INTO die_box
  (stoffgruppe, stoffkuerzel, the_geom)
(SELECT stoffgruppe, stoffkuerzel,
  ST_Multi(
    ST_Union(
      ST_Buffer(the_geom, 30, 15)
    )
  ) FROM stoffe_typ_a
WHERE stoffkuerzel = 'PESTALL'
GROUP BY stoffgruppe, stoffkuerzel);
```

```
INSERT INTO die_box (... , ... , the_geom)
...
```



Vielen Dank für Ihre Aufmerksamkeit!

