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AUTHORITATIVE GEO-INFORMATION
FRAMEWORK FOR EUROPE

Generalisation of NUTS

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EG Producer Meeting, Amsterdam

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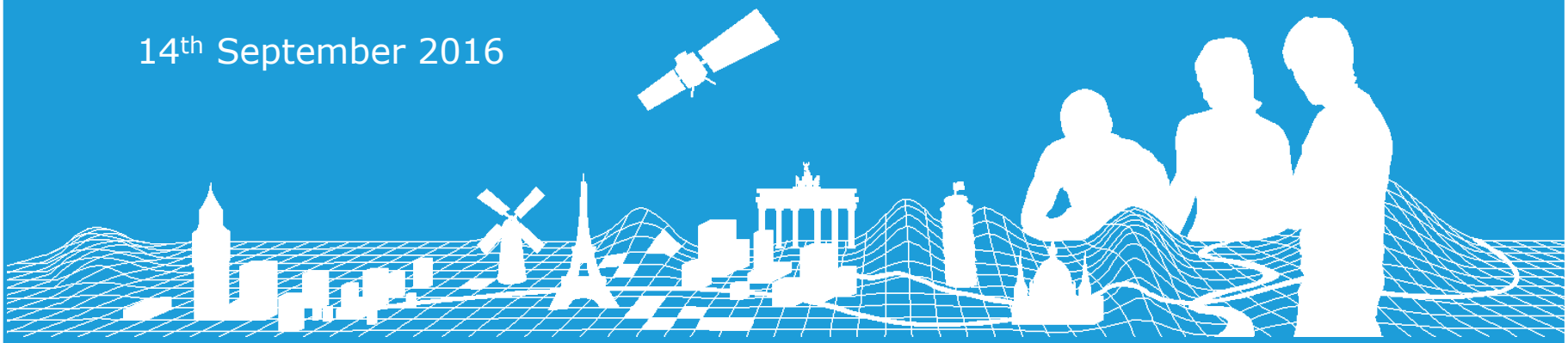
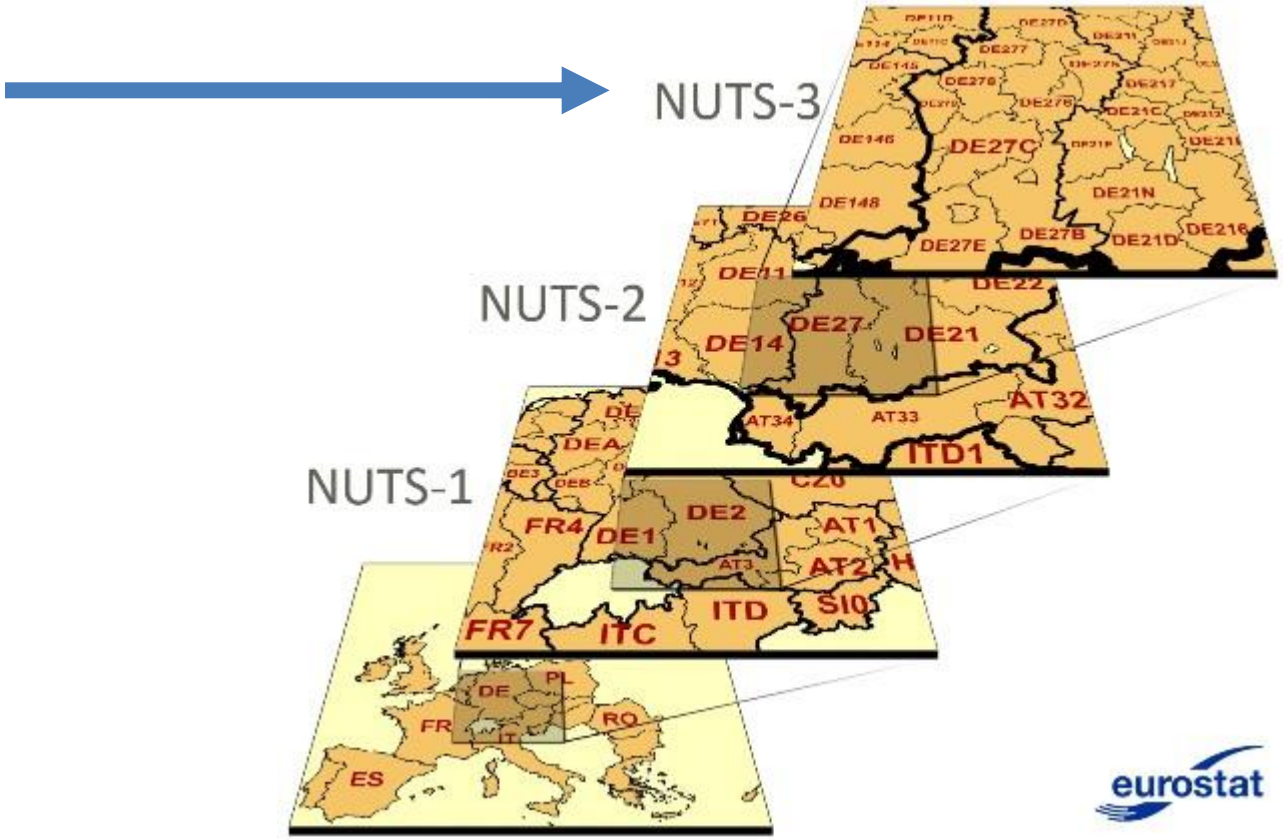


NUTs product

- Eurostat asked if they could do this
- Under current licensing they cannot
- We can ask our members for permission BUT we could look at this ourselves
- Benefits:
  - Under our control
  - We can market it to other customers
  - We can include it in our production cycle ensuring data quality and protecting out members data and our brand

NUTs?

- The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for the purpose of:
  - Socio-economic analyses of the regions
    NUTS 3: small regions for specific diagnoses


NUTS-3
NUTS-2
NUTS-1
DE27C
DE21N
DE27E
DE27B
DE21D
DE216
DE148
DE146
DE14
DE27
DE21
AT32
AT34
AT33
ITD1
DEA
FR4
DE1
DE2
AT1
AT2
H
FR7
ITC
ITD
SI0
CZ0
DE
PL
FR
IT
RO
ES

eurostat

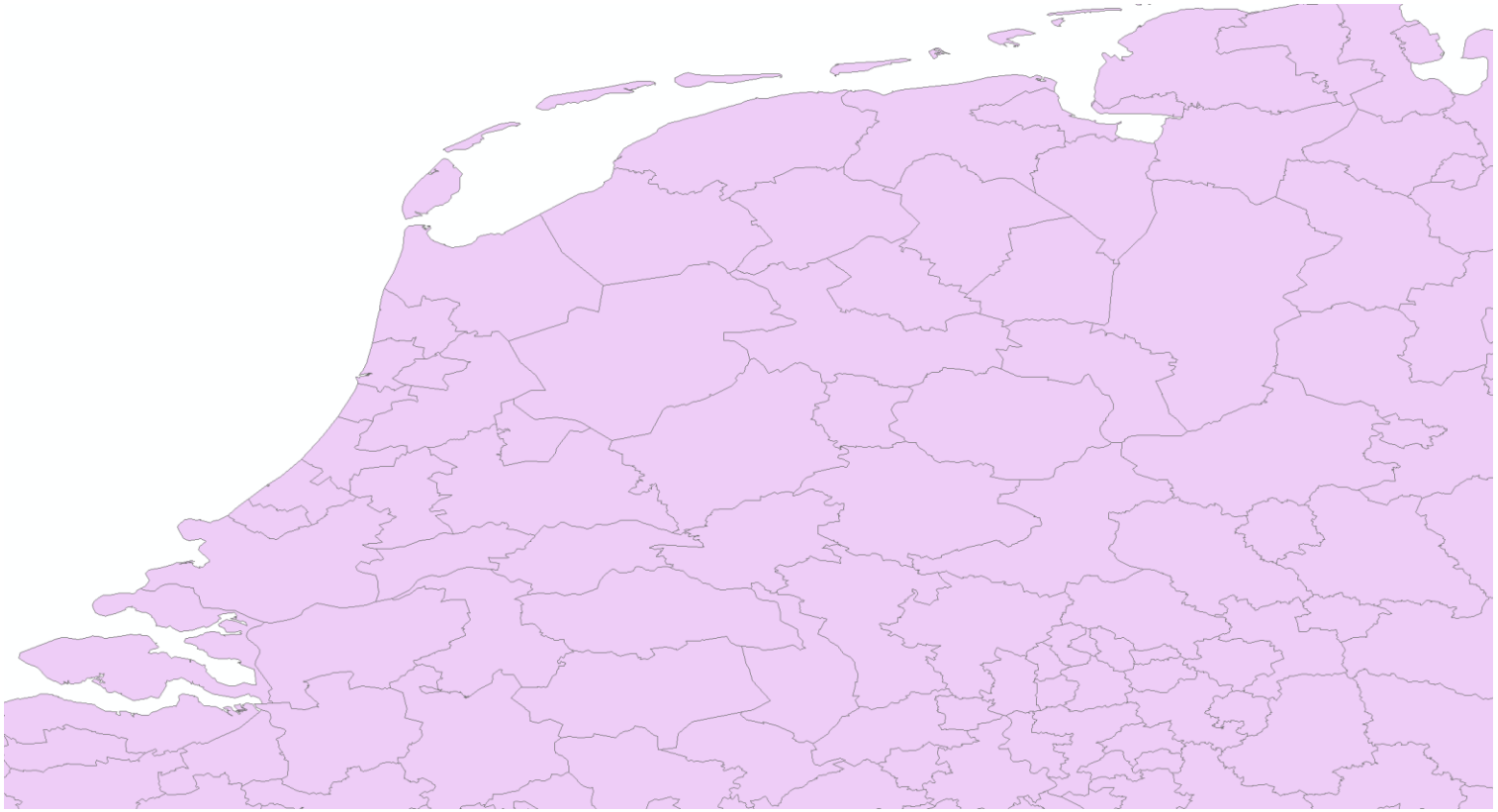
Process

- NUTS_3 layer input
- 3 level generalisation (1:1M,1:5M,1:10M)
  (1M->1:5M->1:10M)
- Generalisation steps:
  - Aggregation
  - Simplification
  - Elimination of small polygons

  ArcGIS Tools

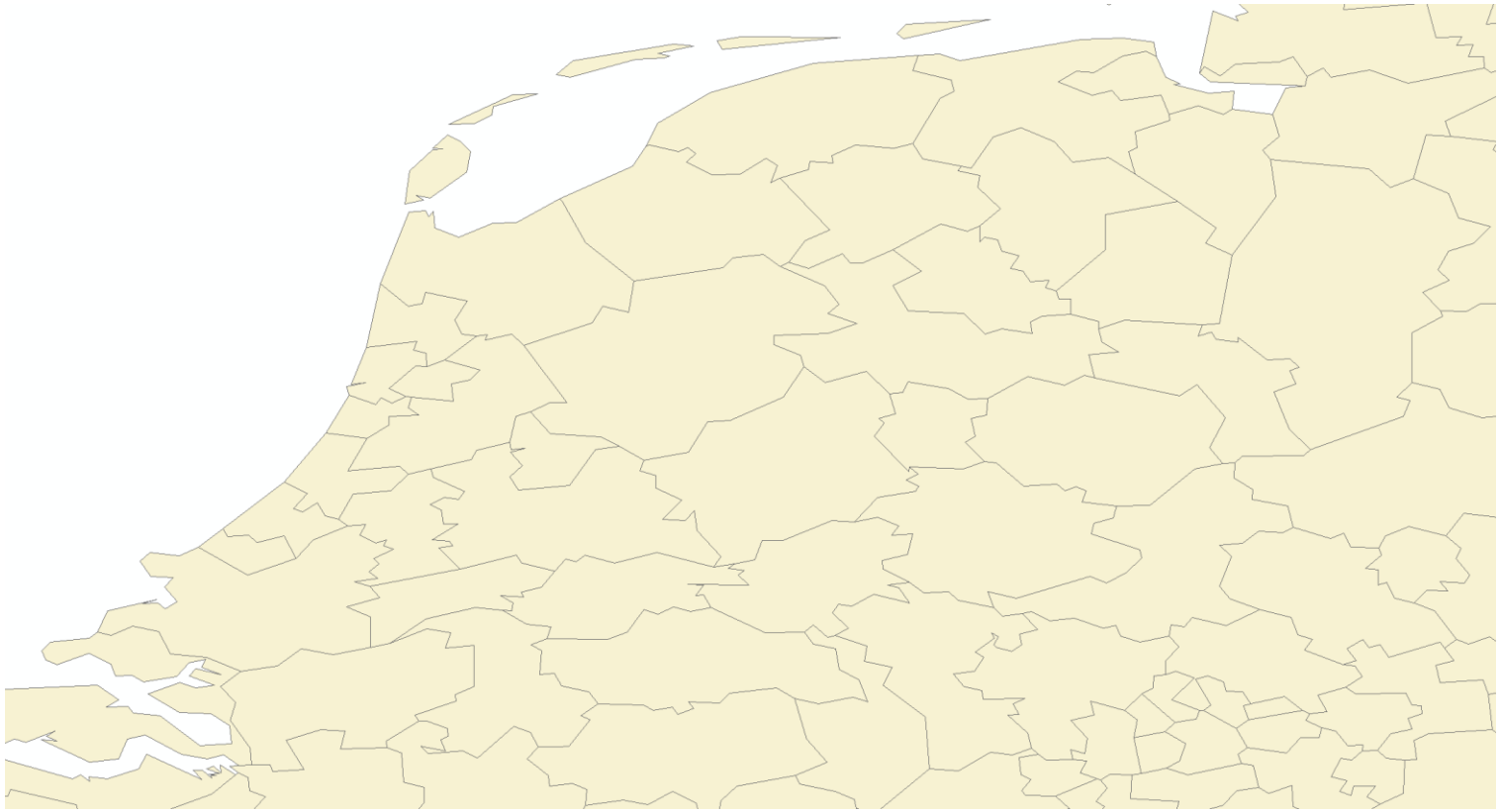
Live demonstration….

1:1M Generalisation



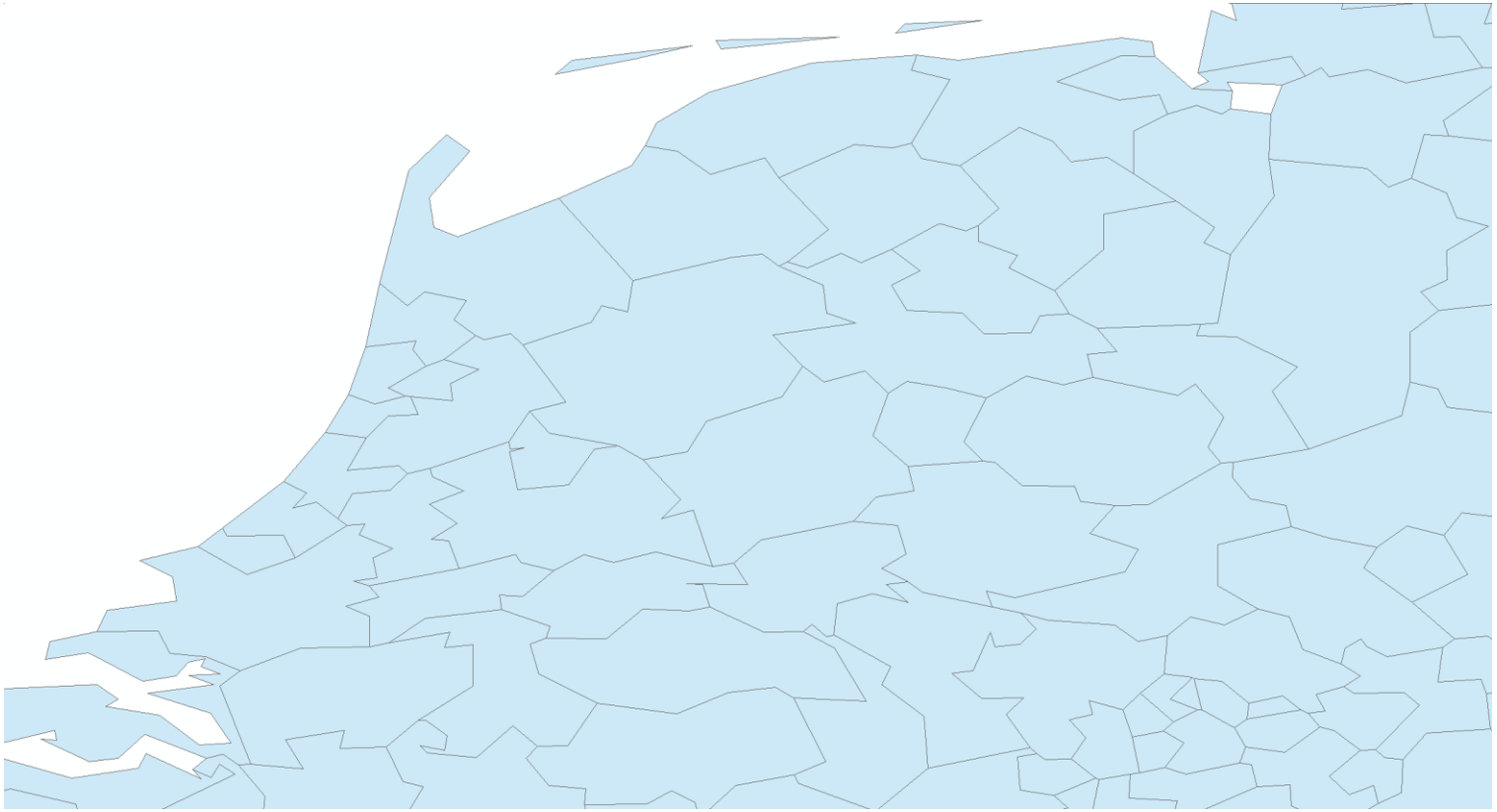
Scale	Aggregation distance	Simplification tolerance	Area constraint
1:1M	300 Meters	150 Meters	2750000 Square Meters

1:5M Generalisation



Scale	Aggregation distance	Simplification tolerance	Area constraint
1:5M	2400 Meters	1200 Meters	17500000 Square Meters

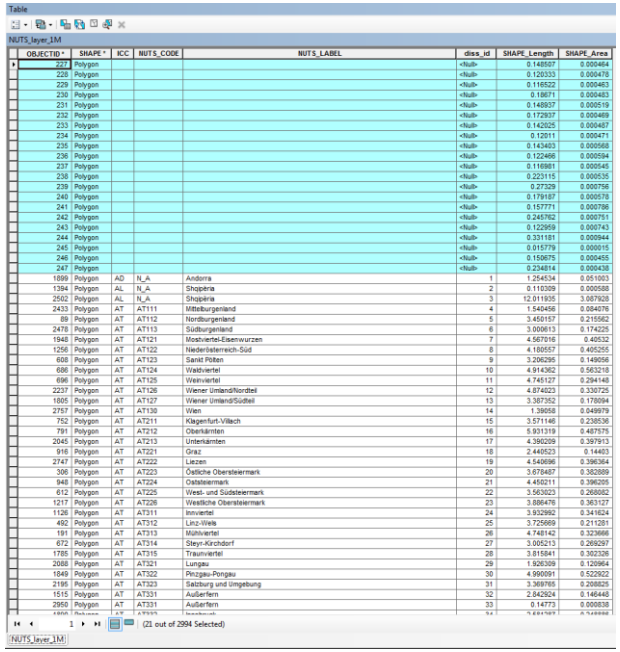
1:10M Generalisation



Scale	Aggregation distance	Simplification tolerance	Area constraint
1:10M	4800 Meters	2400 Meters	35000000 Square Meters

Some errors….

Missing Nuts_code….



Table

NUTS_layer_1M

OBJECTID *	SHAPE *	ICC	NUTS_CODE	NUTS_LABEL	diss_id	SHAPE_Length	SHAPE_Area
227	Polygon				<Null>	0.148507	0.000464
228	Polygon				<Null>	0.120333	0.000478
229	Polygon				<Null>	0.116522	0.000463
230	Polygon				<Null>	0.18671	0.000483
231	Polygon				<Null>	0.148937	0.000519
232	Polygon				<Null>	0.172937	0.000469
233	Polygon				<Null>	0.142025	0.000457
234	Polygon				<Null>	0.12011	0.000471
235	Polygon				<Null>	0.143403	0.000568
236	Polygon				<Null>	0.122466	0.000594
237	Polygon				<Null>	0.116981	0.000545
238	Polygon				<Null>	0.223115	0.000535
239	Polygon				<Null>	0.27329	0.000756
240	Polygon				<Null>	0.179187	0.000578
241	Polygon				<Null>	0.157771	0.000786
242	Polygon				<Null>	0.245762	0.000751
243	Polygon				<Null>	0.122959	0.000743
244	Polygon				<Null>	0.331181	0.000944
245	Polygon				<Null>	0.015779	0.000015
246	Polygon				<Null>	0.150675	0.000455
247	Polygon				<Null>	0.234814	0.000438
1899	Polygon	AD	N_A	Andorra	1	1.254534	0.051003
1394	Polygon	AL	N_A	Shqipëria	2	0.110309	0.000588
2502	Polygon	AL	N_A	Shqipëria	3	12.011935	3.087928
2433	Polygon	AT	AT111	Mittelburgenland	4	1.540456	0.084076
89	Polygon	AT	AT112	Nordburgenland	5	3.450157	0.215562
2478	Polygon	AT	AT113	Südburgenland	6	3.000613	0.174225
1948	Polygon	AT	AT121	Mostviertel-Eisenwurzen	7	4.567016	0.40532
1256	Polygon	AT	AT122	Niederösterreich-Süd	8	4.180557	0.405265
608	Polygon	AT	AT123	Sankt Pölten	9	3.206295	0.149056
686	Polygon	AT	AT124	Waldviertel	10	4.914362	0.563218
696	Polygon	AT	AT125	Weinviertel	11	4.745127	0.294146
2237	Polygon	AT	AT126	Wiener Umland/Nordteil	12	4.874023	0.330725
1805	Polygon	AT	AT127	Wiener Umland/Südteil	13	3.387352	0.178094
2757	Polygon	AT	AT130	Wien	14	1.39058	0.049979
752	Polygon	AT	AT211	Klagenfurt-Villach	15	3.571146	0.238536
791	Polygon	AT	AT212	Oberkärnten	16	5.931319	0.487575
2045	Polygon	AT	AT213	Unterkärnten	17	4.390209	0.397913
916	Polygon	AT	AT221	Graz	18	2.440523	0.14403
2747	Polygon	AT	AT222	Liezen	19	4.540696	0.396364
306	Polygon	AT	AT223	Östliche Obersteiermark	20	3.678487	0.382889
948	Polygon	AT	AT224	Oststeiermark	21	4.450211	0.396205
612	Polygon	AT	AT225	West- und Südsteiermark	22	3.563023	0.269862
1217	Polygon	AT	AT226	Westliche Obersteiermark	23	3.886476	0.363127
1126	Polygon	AT	AT311	Innviertel	24	3.932992	0.341624
492	Polygon	AT	AT312	Linz-Wels	25	3.725669	0.211281
191	Polygon	AT	AT313	Mühlviertel	26	4.748142	0.323666
672	Polygon	AT	AT314	Steyr-Kirchdorf	27	3.005213	0.269297
1785	Polygon	AT	AT315	Traunviertel	28	3.815841	0.302326
2088	Polygon	AT	AT321	Lungau	29	1.926309	0.120964
1949	Polygon	AT	AT322	Pinzgau-Pongau	30	4.990091	0.522922
2195	Polygon	AT	AT323	Salzburg und Umgebung	31	3.369765	0.298525
1515	Polygon	AT	AT331	Außerfern	32	2.842924	0.146448
2950	Polygon	AT	AT331	Außerfern	33	0.14773	0.000838

1 (21 out of 2994 Selected)

NUTS_layer_1M

Next steps….

- Small areas do not have NUTS_code.
  - Find the “mother polygons” to fill the right attributes or delete small areas.
- Finetuning the process...
  - Find the “mother polygons” to fill the right attributes or delete small areas.

Thank you for your attention..