Frontier 1 : Maps

Claude Grasland

27/03/2021

DATA PREPARATION

Load hypercube

We have collected titles of news declared as *international* as long as we have depicted the existence of at less one foreign country in the text of the title. In each of the 5 countries, we have selected three newspapers with national audience and available through mediacloud database from mid 2013 to mid 2020.

```
##               who      N
## 1: fr_FRA_lmonde 104176
## 2: fr_FRA_figaro 240318
## 3: fr_FRA_lacroi 249445
```

```
##               who      N
## 1: de_DEU_suddeu  83774
## 2: de_DEU_diewel 112065
## 3: de_DEU_frankf 103111
```

```
##               who      N
## 1: en_GBR_dailyt  62657
## 2: en_GBR_indept 156128
## 3: en_GBR_guardi 171949
```

```
##               who      N
## 1: it_ITA_stampa  90059
## 2: it_ITA_messag 104909
## 3: it_ITA_repubb  86468
```

```
##               who      N
## 1: es_ESP_abcxxx 280895
## 2:  es_ESP_mundo  38457
## 3: es_ESP_percat 142259
```

Compute news flow between host and guest countries and modelize

What is the distribution of foreign news in each country ? We aggregate news for the whole period by host and guest countries. Then we modelize the expected number of news Fij through a double contrtaint model based on the marginal sums of news produced by each host country (i) about each guest country (j). Estimation are realized by a **poisson regression model**.

Prepare world map

We use the world map elaborated by Romain Leconte for his PhD and we choose the full version for centroid and the simplified version for drawing maps. We use a Lambrt Azimuthal Projection centerd on Paris with the formulata *crs = "+proj=laea +x_0=0 +y_0=0 +lon_0=2 +lat_0=49".*

We try(as an experiment) to use the new package `mapsf` elaborated by RIATE which is the follower of the well known package `cartography`.
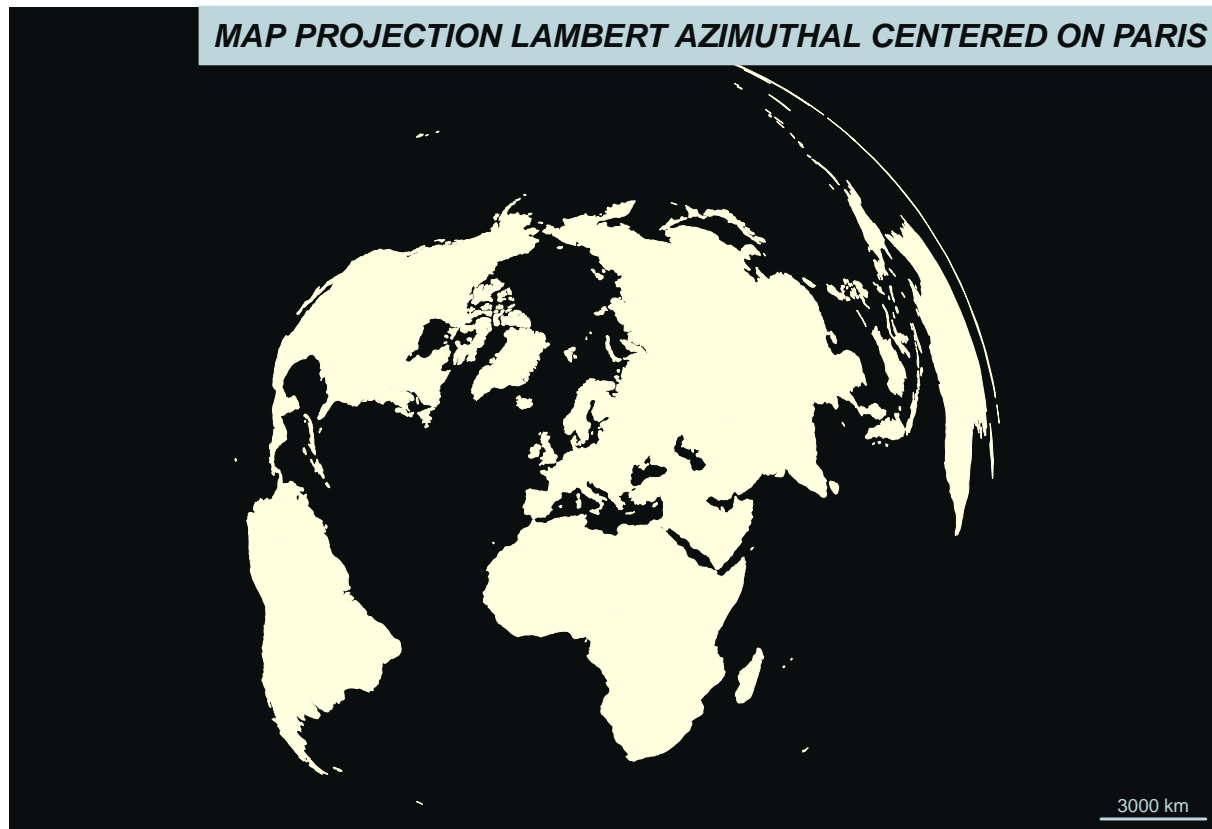
https://riatelab.github.io/mapsf/articles/mapsf.html

MAP PROJECTION LAMBERT AZIMUTHAL CENTERED ON PARIS

3000 km

Table 1: Top countries mentionned by french newspapers (2013-2020)

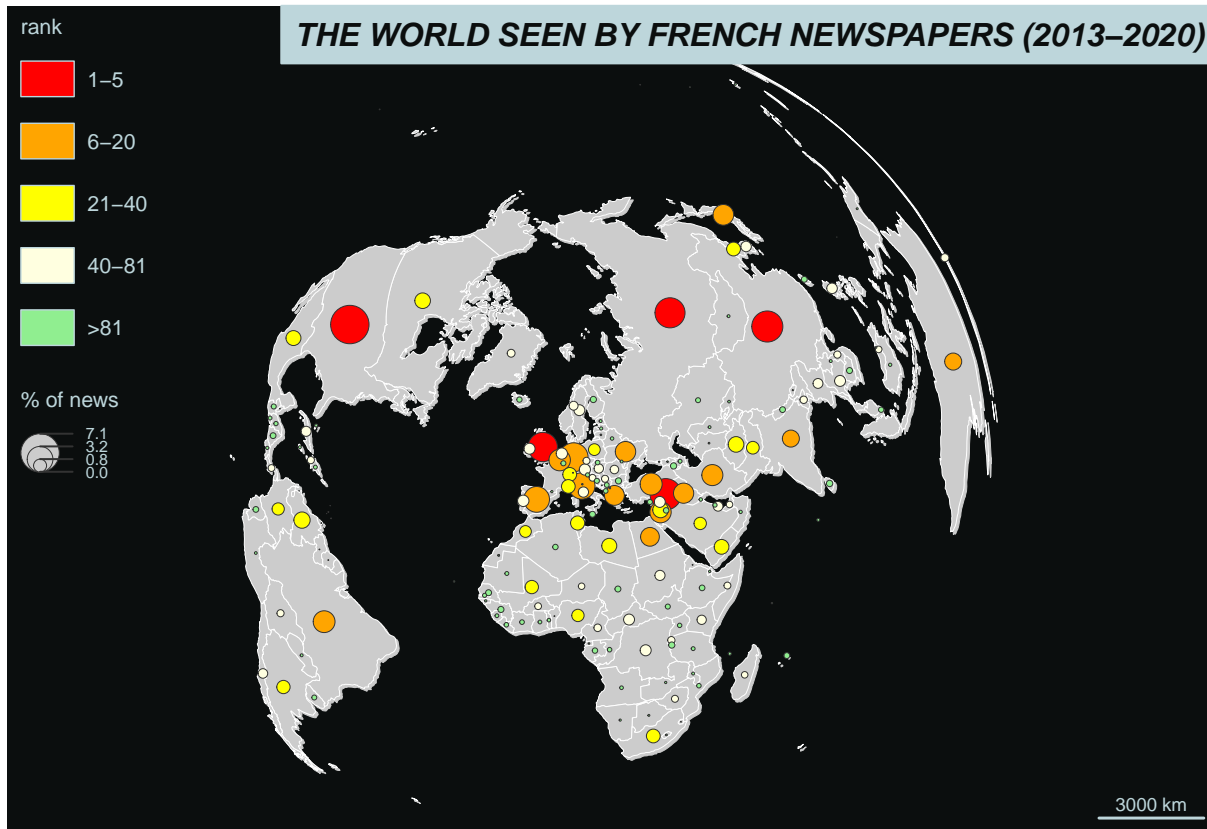| Rank	Code	Country	Nb.of news	%	Cum. %
1	USA	United States of America	13583	7.1	7.1
2	SYR	Syria	9025	4.7	11.7
3	CHN	China	8900	4.6	16.4
4	RUS	Russia	8324	4.3	20.7
5	GBR	United Kingdom	7888	4.1	24.8
6	DEU	Germany	7740	4.0	28.8
7	ITA	Italy	6414	3.3	32.1
8	ESP	Spain	6100	3.2	35.3
9	TUR	Turkey	4460	2.3	37.6
10	BRA	Brazil	4376	2.3	39.9
11	BEL	Belgium	4249	2.2	42.1
12	ISR	Israel	4202	2.2	44.3
13	IRN	Iran	4083	2.1	46.4
14	JPN	Japan	3941	2.0	48.4
15	UKR	Ukraine	3832	2.0	50.4

Table 2: Top countries mentionned by german newspapers (2013-2020)

Rank	Code	Country	Nb.of news	%	Cum. %
1	USA	United States of America	8796	8.6	8.6
2	FRA	France	6241	6.1	14.7
3	RUS	Russia	5876	5.8	20.5
4	CHN	China	5677	5.6	26.0
5	TUR	Turkey	5483	5.4	31.4
6	GBR	United Kingdom	5413	5.3	36.7
7	ITA	Italy	3749	3.7	40.4
8	GRC	Greece	3659	3.6	43.9
9	ESP	Spain	3288	3.2	47.2
10	SYR	Syria	2719	2.7	49.8
11	AUT	Austria	2529	2.5	52.3
12	BRA	Brazil	2366	2.3	54.6
13	UKR	Ukraine	2180	2.1	56.8
14	CHE	Switzerland	2029	2.0	58.7
15	ISR	Israel	1925	1.9	60.6

Table 3: Top countries mentionned by british newspapers (2013-2020)

Rank	Code	Country	Nb.of news	%	Cum. %
1	FRA	France	17788	7.4	7.4
2	USA	United States of America	15235	6.3	13.7
3	AUS	Australia	14631	6.1	19.8
4	RUS	Russia	11646	4.8	24.6
5	CHN	China	11449	4.8	29.4
6	ESP	Spain	8229	3.4	32.8
7	SYR	Syria	7882	3.3	36.1
8	DEU	Germany	7770	3.2	39.3
9	IRL	Ireland	6837	2.8	42.1
10	IND	India	6652	2.8	44.9
11	ITA	Italy	5850	2.4	47.3
12	BRA	Brazil	5806	2.4	49.7
13	JPN	Japan	4430	1.8	51.6
14	IRN	Iran	3998	1.7	53.2
15	TUR	Turkey	3955	1.6	54.9

Table 4: Top countries mentionned by spanish newspapers (2013-2020)

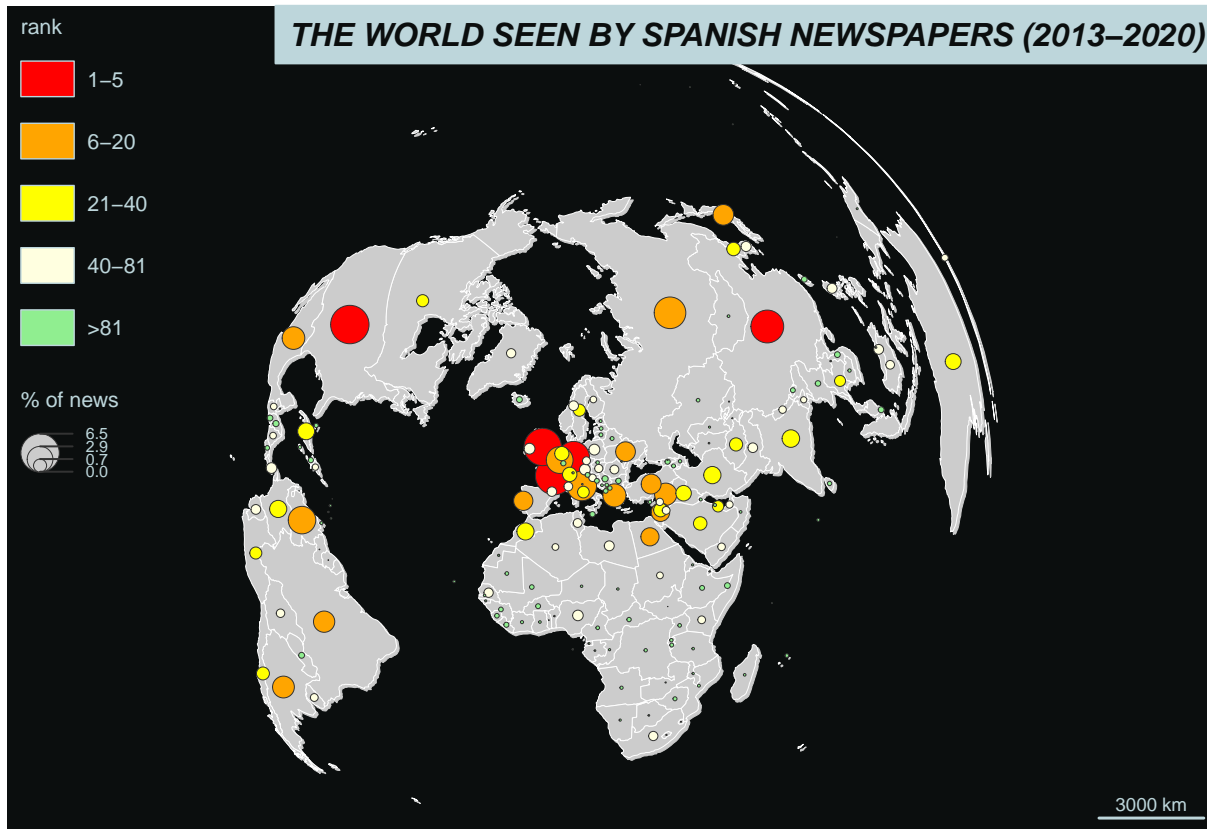| Rank	Code	Country	Nb.of news	%	Cum. %
1	USA	United States of America	9045	6.5	6.5
2	FRA	France	8842	6.3	12.8
3	GBR	United Kingdom	8548	6.1	18.9
4	CHN	China	6603	4.7	23.6
5	DEU	Germany	6195	4.4	28.0
6	RUS	Russia	6125	4.4	32.4
7	ITA	Italy	5372	3.8	36.2
8	VEN	Venezuela	4630	3.3	39.5
9	BEL	Belgium	4396	3.1	42.6
10	GRC	Greece	3276	2.3	45.0
11	MEX	Mexico	3148	2.2	47.2
12	SYR	Syria	3043	2.2	49.4
13	ARG	Argentina	2918	2.1	51.5
14	BRA	Brazil	2773	2.0	53.5
15	JPN	Japan	2612	1.9	55.3

Table 5: Top countries mentionned by italian newspapers (2013-2020)

Rank	Code	Country	Nb.of news	%	Cum. %
1	FRA	France	6164	7.6	7.6
2	CHN	China	5256	6.5	14.1
3	DEU	Germany	4437	5.5	19.6
4	ESP	Spain	4311	5.3	24.9
5	RUS	Russia	3975	4.9	29.8
6	GBR	United Kingdom	3853	4.8	34.5
7	USA	United States of America	3183	3.9	38.5
8	BRA	Brazil	2788	3.4	41.9
9	JPN	Japan	2148	2.6	44.5
10	LBY	Libya	1923	2.4	46.9
11	GRC	Greece	1862	2.3	49.2
12	BEL	Belgium	1774	2.2	51.4
13	SYR	Syria	1738	2.1	53.5
14	TUR	Turkey	1719	2.1	55.7
15	IND	India	1431	1.8	57.4

Table 6: Most significant positive residuals of French Newspapers

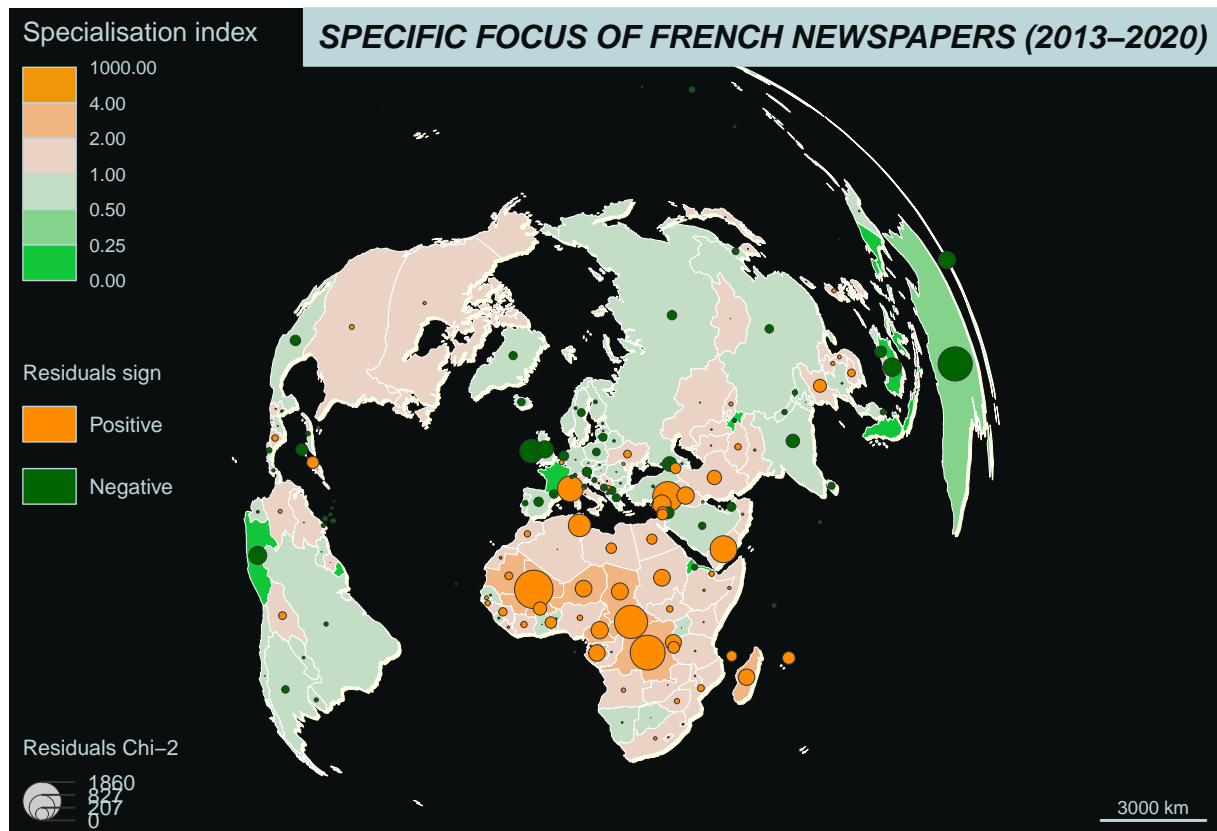|	Code	Country	Observed	Estimated	Difference	Ratio	Chi-square
1	MLI	Mali	1641	592	1049	2.77	1860.3
2	COD	Dem. Rep. Congo	1122	369	753	3.04	1534.1
3	CAF	Central African Rep.	1105	379	726	2.91	1387.4
4	SYR	Syria	9025	6343	2682	1.42	1133.8
5	YEM	Yemen	2005	1033	972	1.94	915.8
6	MCO	Monaco	1728	877	851	1.97	826.9
7	TUN	Tunisia	1842	1030	812	1.79	640.8
8	LBN	Lebanon	1113	599	514	1.86	440.9
9	IRQ	Iraq	3756	2737	1019	1.37	379.0
10	CMR	Cameroon	531	234	297	2.27	377.4
11	TCD	Chad	326	119	207	2.75	363.3
12	SDN	Sudan	947	518	429	1.83	355.4
13	NER	Niger	385	153	232	2.51	350.0
14	GAB	Gabon	269	92	177	2.92	340.5
15	MDG	Madagascar	394	161	233	2.45	339.1

Table 7: Most significant positive residuals of German Newspapers

	Code	Country	Observed	Estimated	Difference	Ratio	Chi-square
1	TUR	Turkey	5483	2413	3070	2.27	3905.8
2	AUT	Austria	2529	803	1726	3.15	3706.7
3	POL	Poland	1828	838	990	2.18	1168.0
4	JAM	Jamaica	586	161	425	3.65	1127.9
5	CHE	Switzerland	2029	1000	1029	2.03	1058.9
6	GRC	Greece	3659	2165	1494	1.69	1031.1
7	USA	United States of America	8796	6667	2129	1.32	680.0
8	HUN	Hungary	848	422	426	2.01	430.8
9	RUS	Russia	5876	4808	1068	1.22	237.2
10	SWE	Sweden	1126	732	394	1.54	212.0
11	DNK	Denmark	731	430	301	1.70	211.4
12	UKR	Ukraine	2180	1716	464	1.27	125.7
13	LUX	Luxembourg	231	115	116	2.00	116.1
14	ITA	Italy	3749	3197	552	1.17	95.3
15	CHN	China	5677	5067	610	1.12	73.3

Table 8: Most significant positive residuals of British Newspapers

	Code	Country	Observed	Estimated	Difference	Ratio	Chi-square
1	AUS	Australia	14631	6772	7859	2.16	9122.1
2	IRL	Ireland	6837	2949	3888	2.32	5124.2
3	NZL	New Zealand	3569	1603	1966	2.23	2413.0
4	IND	India	6652	4367	2285	1.52	1196.1
5	ZAF	South Africa	3163	1953	1210	1.62	749.5
6	JOR	Jordan	1400	749	651	1.87	566.1
7	LKA	Sri Lanka	1232	681	551	1.81	444.9
8	PRK	North Korea	3608	2595	1013	1.39	395.1
9	GEO	Georgia	770	387	383	1.99	378.5
10	PAK	Pakistan	2493	1702	791	1.46	367.7
11	SAU	Saudi Arabia	3027	2142	885	1.41	365.4
12	ARE	United Arab Emirates	1313	791	522	1.66	344.6
13	MYS	Malaysia	1493	942	551	1.59	322.5
14	NRU	Nauru	188	65	123	2.89	233.1
15	IDN	Indonesia	1173	758	415	1.55	226.6

SPECIFIC FOCUS OF BRITISH NEWSPAPERS (2013–2020)

Specialisation index

1000.00
4.00
2.00
1.00
0.50
0.25
0.00

Residuals sign

Positive

Negative

Residuals Chi−2

9122
4056
1015
0

3000 km

Table 9: Most significant positive residuals of Spanish Newspapers

	Code	Country	Observed	Estimated	Difference	Ratio	Chi-square
1	VEN	Venezuela	4630	1693	2937	2.74	5097.0
2	ARG	Argentina	2918	1411	1507	2.07	1611.1
3	AND	Andorra	562	121	441	4.63	1601.7
4	PRT	Portugal	2273	1007	1266	2.26	1591.3
5	MAR	Morocco	1808	735	1073	2.46	1564.0
6	CUB	Cuba	1759	778	981	2.26	1235.3
7	COL	Colombia	1811	861	950	2.10	1047.7
8	BEL	Belgium	4396	2749	1647	1.60	987.5
9	MEX	Mexico	3148	1868	1280	1.69	877.7
10	PER	Peru	889	377	512	2.36	693.8
11	ECU	Ecuador	583	257	326	2.27	412.9
12	GBR	United Kingdom	8548	6887	1661	1.24	400.6
13	PAN	Panama	704	362	342	1.94	322.6
14	CHL	Chile	1031	601	430	1.71	306.8
15	SEN	Senegal	535	260	275	2.06	291.8

SPECIFIC FOCUS OF SPANISH NEWSPAPERS (2013–2020)

Specialisation index
1000.00
4.00
2.00
1.00
0.50
0.25
0.00

Residuals sign
Positive
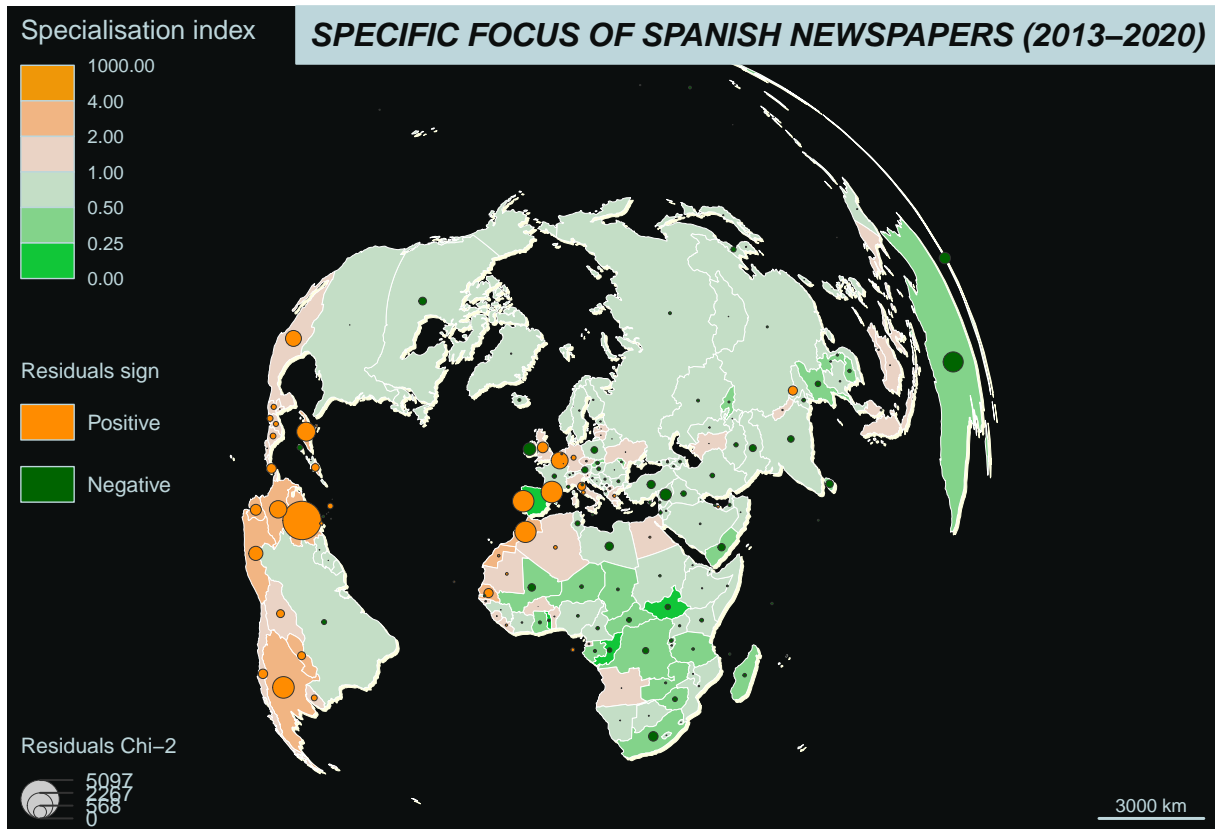Negative

Residuals Chi–2
5097
2687
568
0

3000 km

Table 10: Most significant positive residuals of Italian Newspapers

	Code	Country	Observed	Estimated	Difference	Ratio	Chi-square
1	LBY	Libya	1923	650	1273	2.96	2492.1
2	ALB	Albania	393	102	291	3.84	825.3
3	ESP	Spain	4311	2825	1486	1.53	781.7
4	ROU	Romania	698	285	413	2.45	596.1
5	VAT	Vatican	833	379	454	2.20	543.1
6	DEU	Germany	4437	3178	1259	1.40	498.9
7	MLT	Malta	388	141	247	2.75	431.3
8	SMR	San Marino	135	28	107	4.89	418.2
9	BGR	Bulgaria	412	157	255	2.63	416.0
10	BRA	Brazil	2788	1907	881	1.46	407.1
11	CHN	China	5256	3989	1267	1.32	402.2
12	SYC	Seychelles	100	19	81	5.34	352.3
13	JPN	Japan	2148	1563	585	1.37	219.3
14	SEN	Senegal	316	150	166	2.11	184.6
15	SRB	Serbia	347	173	174	2.01	175.0