

French grocery stores

(Very preliminary)

LEI\*

CREST and Department of Economics, Ecole Polytechnique

September 25, 2014

**Abstract:**

This note provides an overview of French grocery stores in 2014. All the analysis relies on data provided by LSA on hypermarkets, supermarkets, hard discount stores and "drive-through".

**Keywords:**

**JEL Classification Numbers:** XXX

---

\*e-mail: *etienne.chamayou@ensae.fr*

# 1 Introduction

Data provided by LSA include 17,254 French grocery stores. LSA provide three columns regarding the activity of stores over time: an opening date, a closing date and a re-opening date. Stores can thus be considered closed when they have a closing date but no reopening date. According to LSA data, beginning 2014, there were 15,086 hypermarkets, supermarkets, hard discount and "drive-through" stores operating in France.

## 2 Overview of store population by type

### 2.1 Surface by type

Descriptive statistics on surface by type show that grocery stores with a surface between 400 and 2500  $m^2$  are categorized as supermarkets, while those with a surface exceeding 2500  $m^2$  are categorized as hypermarkets. The type "Magasins Populaires" is attributed to stores with a significant surface dedicated to non food products (most of them belong to the same retail chain as will be shown later).

Table 1: Surface in  $m^2$  by type of store

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Hypermarkets	2,031	2,031	2,500	2,512	4,000	5,360	12,288	24,000	10,885,500
Supermarkets	5,771	5,771	400	406	1,200	1,286	2,346	2,499	7,422,118
Hard discount	4,477	4,477	100	318	770	772	1,171	2,000	3,455,127
All	12,279	12,279	100	400	990	1,772	6,000	24,000	21,762,745

## 2.2 Number of employees

Table 2: Number of employees by type of store

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Hypermarkets	2,031	2,031	20	45	125	171	450	1,000	346,928
Supermarkets	5,771	5,771	1	6	26	29	65	200	165,983
Hard discount	4,477	4,477	2	5	9	10	20	151	44,267
All	12,279	12,279	1	5	17	45	200	1,000	557,178

## 2.3 Number of checkouts by type

Table 3: Number of checkouts by type of store

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Hypermarkets	2,031	2,030	5	10	19	23	50	358	47,307
Supermarkets	5,771	5,771	1	3	6	7	12	27	39,332
Hard discount	4,477	4,476	1	2	4	4	8	42	19,495
All	12,279	12,277	1	2	6	9	26	358	106,134

## 2.4 Size of Parking by type

Table 4: Size of parking by type of store

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Hypermarkets	2,031	1,933	18	170	500	759	2,191	7,660	1,467,088
Supermarkets	5,771	4,323	2	30	120	135	300	2,577	585,731
Hard discount	4,477	1,509	3	29	73	87	200	1,200	131,833
All	12,279	7,765	2	30	140	281	1,100	7,660	2,184,652

## 2.5 Number of gas pumps

Table 5: Number of gas pumps by type of store

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Hypermarkets	2,031	1,786	1	4	7	8	14	26	13,956
Supermarkets	5,771	2,912	0	2	4	4	7	16	11,568
Hard discount	4,477	131	1	2	4	4	6	23	519
All	12,279	4,829	0	2	4	5	12	26	26,043

## 3 Stores and surface by group and chain

This section focuses on hypermarkets, supermarkets and hard discount stores (exclude?). "Drive-through" are thus left aside.

### 3.1 Stores and surface by group

The following table shows the number of hypermarkets, supermarkets and hard discount stores operated by the main grocery store groups in France.

Table 6: Type of store and surface by retail group

	All			Nb.			Avg. Surf.			Cum. Surf.		
	Nb.	Cum.	Surf.	Hyp	Sup	Dis	Hyp	Sup	Dis	Hyp	Sup	Dis
CARREFOUR	2,560	4,807,009	372 1,369	819	6,786 1,237	720	2,524,403	1,693,199	589,407			
MOUSQUETAIRES	2,140	3,578,168	348 1,464	328	3,173 1,523	746	1,104,303	2,229,156	244,709			
CASINO	2,044	2,916,267	216 1,162	666	5,269 1,024	883	1,138,093	1,190,041	588,133			
LIDL	1,522	1,253,932	0 0	1,522	nan nan	824	0	0	0	1,253,932		
SYSTEME U	1,059	2,281,056	337 722	0	3,593 1,482	nan	1,210,761	1,070,295	0			
ALDI	917	640,460	0 0	917	nan nan	698	0	0	0	640,460		
LECLERC	626	2,975,081	522 104	0	5,408 1,463	nan	2,822,947	152,134	0			
AUCHAN	565	2,002,785	159 406	0	9,074 1,380	nan	1,442,698	560,087	0			
LOUIS DELHAIZE	201	802,616	69 132	0	8,693 1,536	nan	599,836	202,780	0			
DIAPAR	116	61,823	0 116	0	nan 533	nan	0	61,823	0			
COLRUYT	110	92,023	0 110	0	nan 837	nan	0	92,023	0			
AUTRE	419	351,525	8 186	225	5,307 917	615	42,459	170,580	138,486			
ALL	12,279	21,762,745	2,031 5,771	4,477	5,360 1,286	772	10,885,500	7,422,118	3,455,127			

### 3.2 Stores and surface by group and chain

Except for Aldi and Lidl, stores are subdivided in retail chains based on criteria such as the size or the location (city center, suburb, countryside etc.).

### 3.2.1 Carrefour

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
DIA %	819	0	0	819	720	782	215	1,280	589,407
CARREFOUR MARKET	801	114	687	0	1,894	1,800	654	5,600	1,517,038
CARREFOUR CONTACT	402	0	402	0	682	670	400	1,800	274,152
CARREFOUR	221	221	0	0	9,319	9,000	2,500	24,000	2,059,593
CARREFOUR CITY	123	0	123	0	504	450	400	800	61,932
MARKET	121	37	84	0	2,204	2,200	722	4,500	266,736
SHOPPI	34	0	34	0	573	500	400	870	19,494
CARREFOUR EXPRESS	21	0	21	0	475	460	400	750	9,981
CARREFOUR OTHER	18	0	18	0	482	450	400	821	8,676

As of September 2014, Carrefour listed the following chains on its website: "Carrefour", "Carrefour market" (created in 2007 to replace "Champion"), "Carrefour contact" (created in 2008 for stores located in rural areas or in the periphery of cities), "Carrefour city" (created in 2009 for stores located in city centers, opening 6/7 days 7h-22h or 23h), "Carrefour montagne" (created in 2009 for small stores located in the mountains), "Carrefour express" (created in 2007 for small stores, difference with "city" and "contact" is not clear) and "Market" (created in 2012, includes virtually all ex-"Hyper champion").

### 3.2.2 Casino

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
LEADER PRICE	666	0	0	666	883	880	100	2,000	588,133
FRANPRIX	448	0	448	0	608	500	400	2,400	272,411
CASINO	341	16	325	0	1,513	1,500	415	3,000	516,084
MONOPRIX	296	60	236	0	1,792	1,656	402	5,154	530,517
SPAR	113	0	113	0	560	550	400	1,200	63,287
GEANT CASINO	103	103	0	0	7,668	7,600	3,800	17,112	789,782
HYPER CASINO	44	37	7	0	3,138	2,800	2,160	5,950	138,058
MONOP'	19	0	19	0	565	515	400	1,000	10,743
CASINO AUTRE	14	0	14	0	518	520	400	698	7,252

### 3.2.3 Les Mousquetaires

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
INTERMARCHE SUPER	1,362	252	1,110	0	1,947	1,950	499	4,100	2,651,505
NETTO	328	0	0	328	746	704	100	1,780	244,709
INTERMARCHE CONTACT	312	0	312	0	804	800	400	1,500	250,860
INTERMARCHE HYPER	96	96	0	0	4,119	4,000	2,800	6,710	395,413
INTERMARCHE EXPRESS	37	0	37	0	878	928	400	1,340	32,473
INTERMARCHE AUTRE	5	0	5	0	642	620	400	988	3,208

### 3.2.4 Système U

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
SUPER U	729	272	457	0	2,339	2,273	700	5,200	1,705,104
U EXPRESS	230	1	229	0	862	802	400	2,854	198,164
HYPER U	64	64	0	0	5,621	5,310	3,003	11,750	359,726
UTILE	32	0	32	0	486	455	400	700	15,556
MARCHE U	4	0	4	0	626	550	450	956	2,506

### 3.2.5 Leclerc

LECLERC	#Tot	#Hyp	#Sup	#Dis	#MP	Avg S.	Med S.	Min S.	Max S.	Cum S.
CENTRE E.LECLERC	581	526	55	0	0	5063	4709	826	15600	2941426
LECLERC EXPRESS	71	1	70	0	0	1059	995	400	3500	75201

### 3.2.6 Auchan

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
SIMPLY MARKET	304	16	288	0	1,577	1,523	605	3,624	479,471
AUCHAN	135	135	0	0	10,102	9,985	2,800	19,700	1,363,828
ATAC	77	0	77	0	1,339	1,200	700	2,450	103,135
LES HALLES D'AUCHAN	7	7	0	0	4,124	4,000	2,800	5,650	28,870
AUCHAN CITY	1	1	0	0	4,000	4,000	4,000	4,000	4,000
AUCHAN AUTRE	41	0	41	0	573	550	400	900	23,481

### 3.2.7 Louis Delhaize

LOUIS DELHAIZE	#Tot	#Hyp	#Sup	#Dis	#MP	Avg S.	Med S.	Min S.	Max S.	Cum S.
SUPERMARCHE MATCH	144	11	133	0	0	1621	1621	450	2900	233353*
CORA	59	59	0	0	0	9725	9385	2500	15500	573763

### 3.2.8 Diapar

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
G 20	95	0	95	0	546	420	400	1,200	51,895
AUTRE DIAPAR	21	0	21	0	473	400	400	828	9,928

### 3.2.9 Colruyt

	#Tot	#Hyp	#Sup	#Dis	Avg S.	Med S.	Min S.	Max S.	Cum S.
COLRUYT	69	0	69	0	1,002	990	630	1,700	69,149
COCCINELLE	41	0	41	0	558	500	400	1,200	22,874

## 4 Store locations

The following section offers a brief overview of groups' store locations across France. "Drive-through" is not included.

### 4.1 Stores by group and region

The following table provides an overview of the location of stores across regions by groups.

Table 7: Percentage of stores by region within each group

	CARR.	CASI.	MOUS.	LIDL	SYS.U	ALDI	LECL.	AUCH.	L.D.	DIAP.	COLR.	OTH.	TOT.
Ile-de-France	18	36	6	11	5	6	8	23	3	62	3	5	15
Rhone-Alpes	11	11	9	8	8	5	6	6	0	0	4	8	9
PACA	8	11	7	7	6	6	6	4	0	0	0	4	7
Nord-Pas-de-Calais	11	2	5	9	2	16	4	6	29	1	5	1	7
Bretagne	4	4	9	6	12	2	10	0	1	4	3	1	6
Aquitaine	5	5	8	6	5	3	9	4	0	0	2	7	6
Pays de la Loire	4	2	5	6	17	4	8	1	0	10	4	3	5
Midi-Pyrenees	4	5	8	5	4	5	5	2	0	1	0	3	5
Languedoc-Roussillon	4	5	6	6	5	4	2	2	0	5	0	1	4
Lorraine	2	2	3	7	3	10	4	4	31	1	15	11	4
Centre	4	2	5	4	6	4	5	7	1	7	7	3	4
Picardie	4	2	4	3	1	6	4	4	6	2	3	5	3
Bourgogne	2	2	4	2	1	5	4	15	1	0	12	4	3
Haute-Normandie	4	1	3	3	3	3	3	2	0	0	2	11	3
Alsace	1	1	1	4	5	3	7	6	16	0	1	15	3
Poitou-Charentes	1	2	4	3	7	1	5	2	0	1	1	2	3
Basse-Normandie	4	1	2	3	4	2	3	1	0	3	5	5	3
Champagne-Ardenne	2	2	3	2	1	5	4	2	4	1	4	2	2
Franche-Comte	1	2	2	2	3	4	1	4	3	0	27	3	2
Auvergne	2	2	3	2	1	3	2	4	1	0	3	3	2
Limousin	1	2	2	1	2	2	1	1	0	2	0	1	2
TOT.	100	100	100	100	100	100	100	100	100	100	100	100	100

The following table provides an overview of the market power of each group by region

Table 8: Percentage of stores operated by each group in each region

	CARR.	CASI.	MOUS.	LIDL	SYS.U	ALDI	LECL.	AUCH.	L.D.	DIAP.	COLR.	OTH.	TOT.
Ile-de-France	24	39	7	9	3	3	3	7	0	4	0	1	100
Rhone-Alpes	27	21	19	11	8	4	4	3	0	0	0	3	100
PACA	24	26	17	12	7	6	4	2	0	0	0	2	100
Nord-Pas-de-Calais	34	4	12	16	2	17	3	4	7	0	1	0	100
Bretagne	17	11	27	14	18	3	9	0	0	1	0	0	100
Aquitaine	18	15	25	14	7	4	9	4	0	0	0	4	100
Pays de la Loire	16	7	17	14	28	5	7	1	0	2	1	2	100
Midi-Pyrenees	19	16	27	13	7	8	6	2	0	0	0	2	100
Languedoc-Roussillon	20	17	25	16	10	6	2	2	0	1	0	1	100
Lorraine	10	6	13	18	5	16	5	4	11	0	3	9	100
Centre	20	9	21	11	12	7	6	8	0	2	2	2	100
Picardie	26	7	20	11	3	12	6	6	3	0	1	5	100
Bourgogne	12	12	19	9	4	11	5	20	0	0	3	4	100
Haute-Normandie	27	7	15	11	9	8	5	4	0	0	1	13	100
Alsace	4	3	7	15	14	9	12	10	9	0	0	18	100
Poitou-Charentes	10	13	26	13	22	3	9	3	0	0	0	3	100
Basse-Normandie	29	5	15	14	12	7	6	2	0	1	2	7	100
Champagne-Ardenne	19	12	21	12	2	16	7	3	3	0	1	2	100
Franche-Comte	11	10	16	12	12	11	3	7	2	0	10	4	100
Auvergne	22	12	23	11	4	9	4	9	1	0	1	4	100
Limousin	15	20	24	9	13	7	4	3	1	1	0	3	100
TOT.	21	17	17	12	9	7	5	5	2	1	1	3	100

## 4.2 Maps of groups' store locations

For each group, on the first map, supermarkets are represented with green dots and hypermarkets with red dots. The second map accounts for the density of stores across France (stores' size is not taken into account).

Figure 1: CARREFOUR

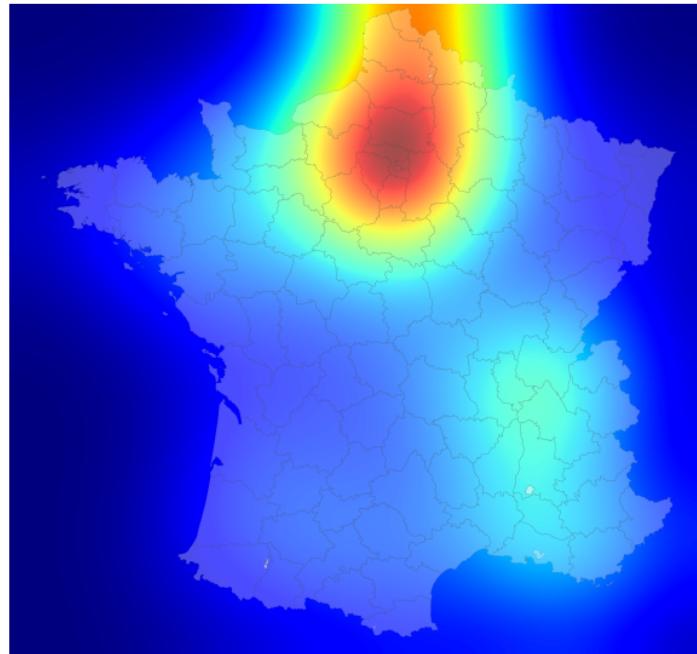
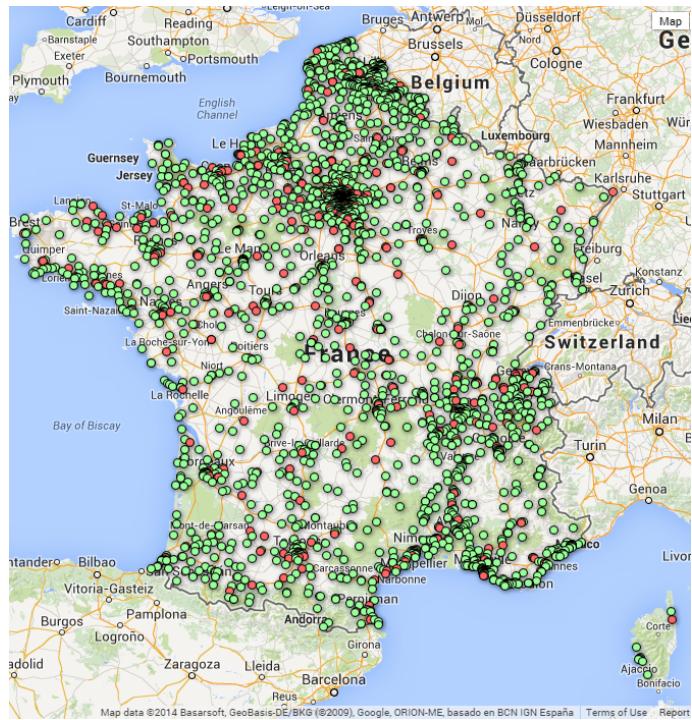


Figure 2: CASINO

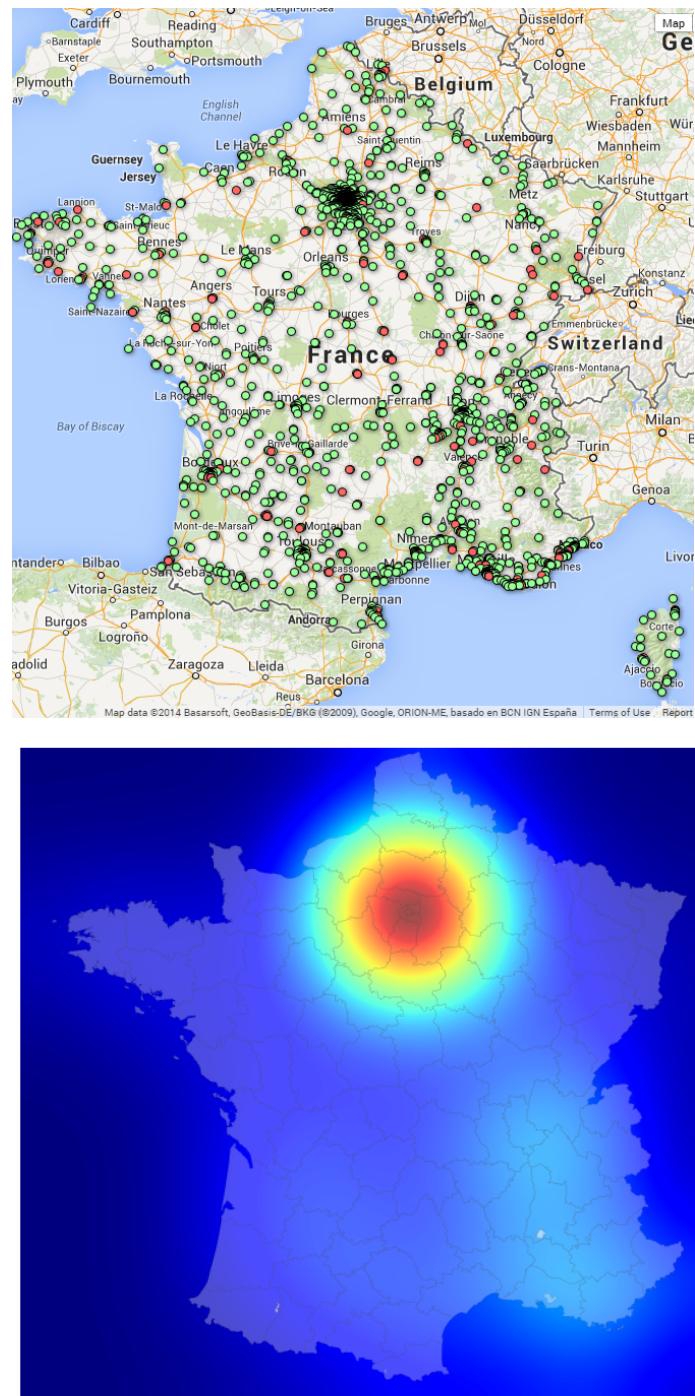


Figure 3: MOUSQUETAIRES

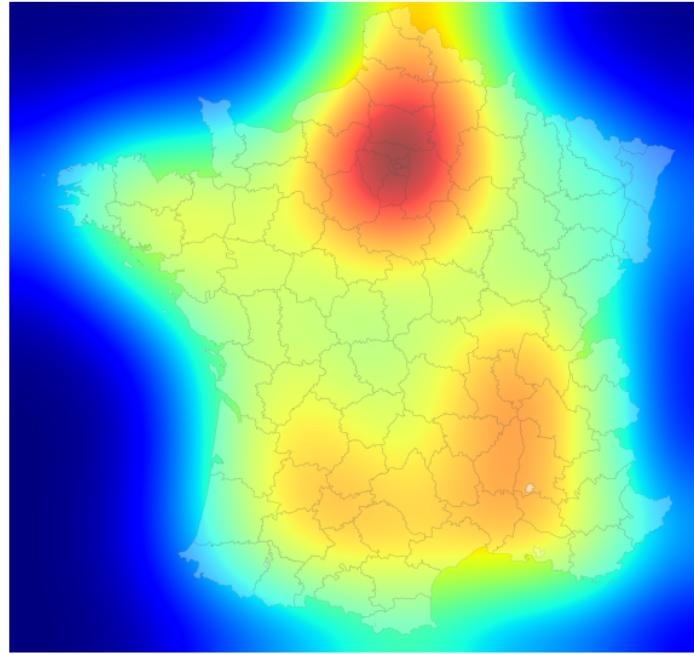
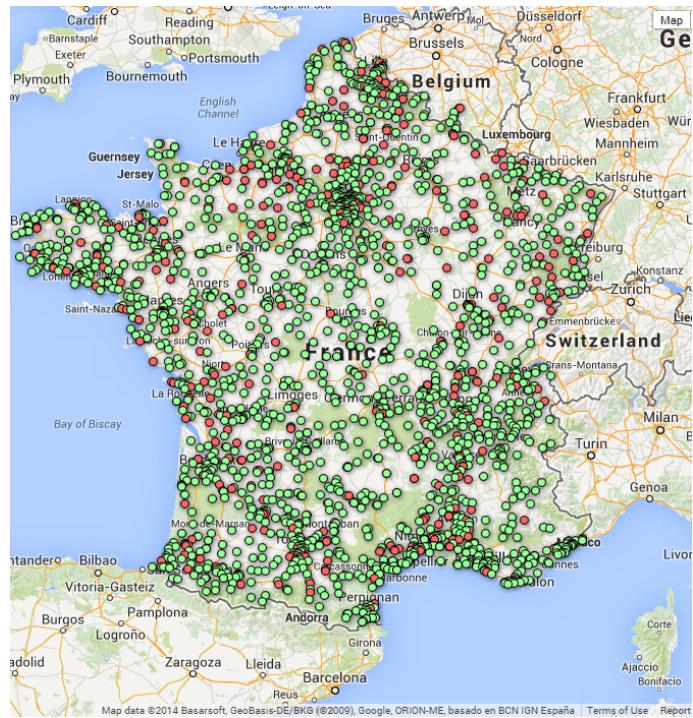


Figure 4: LIDL

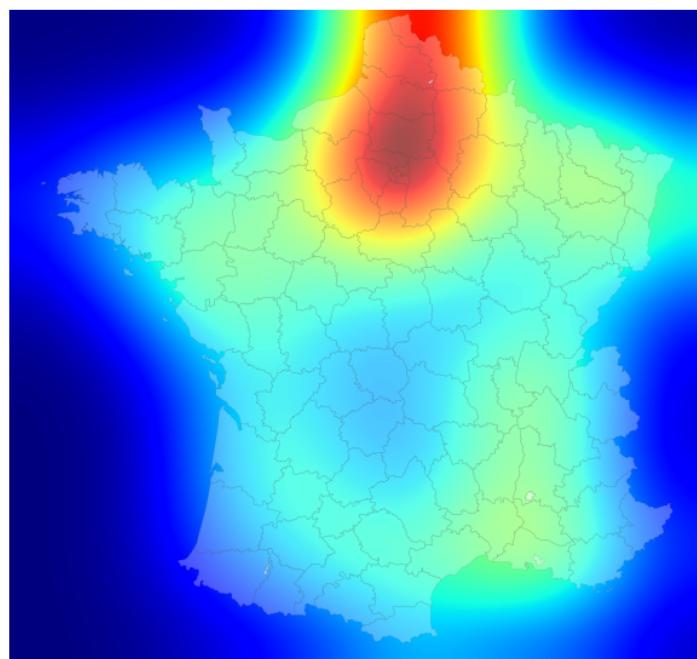
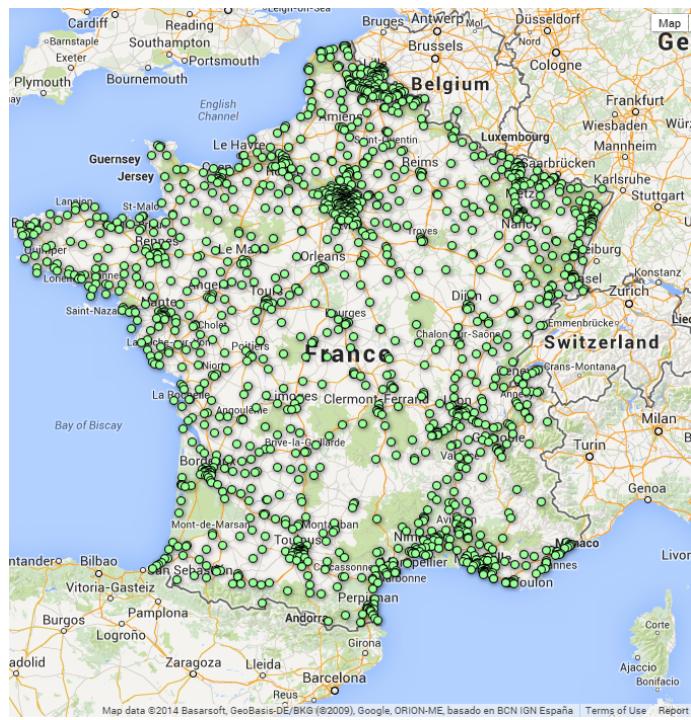


Figure 5: SYSTEME U

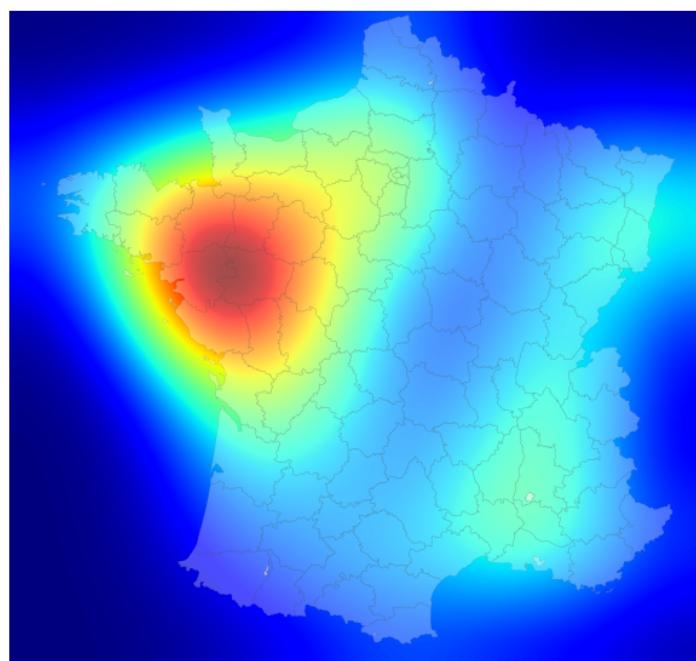
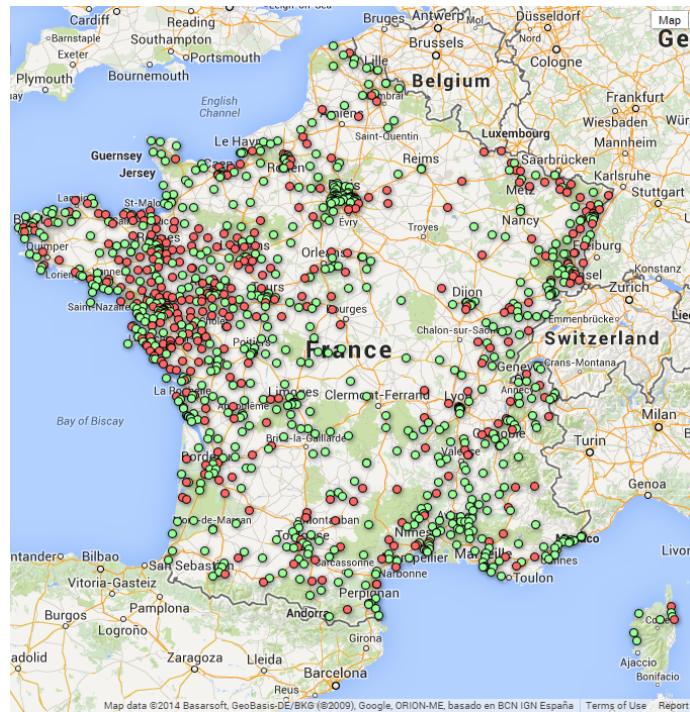


Figure 6: ALDI

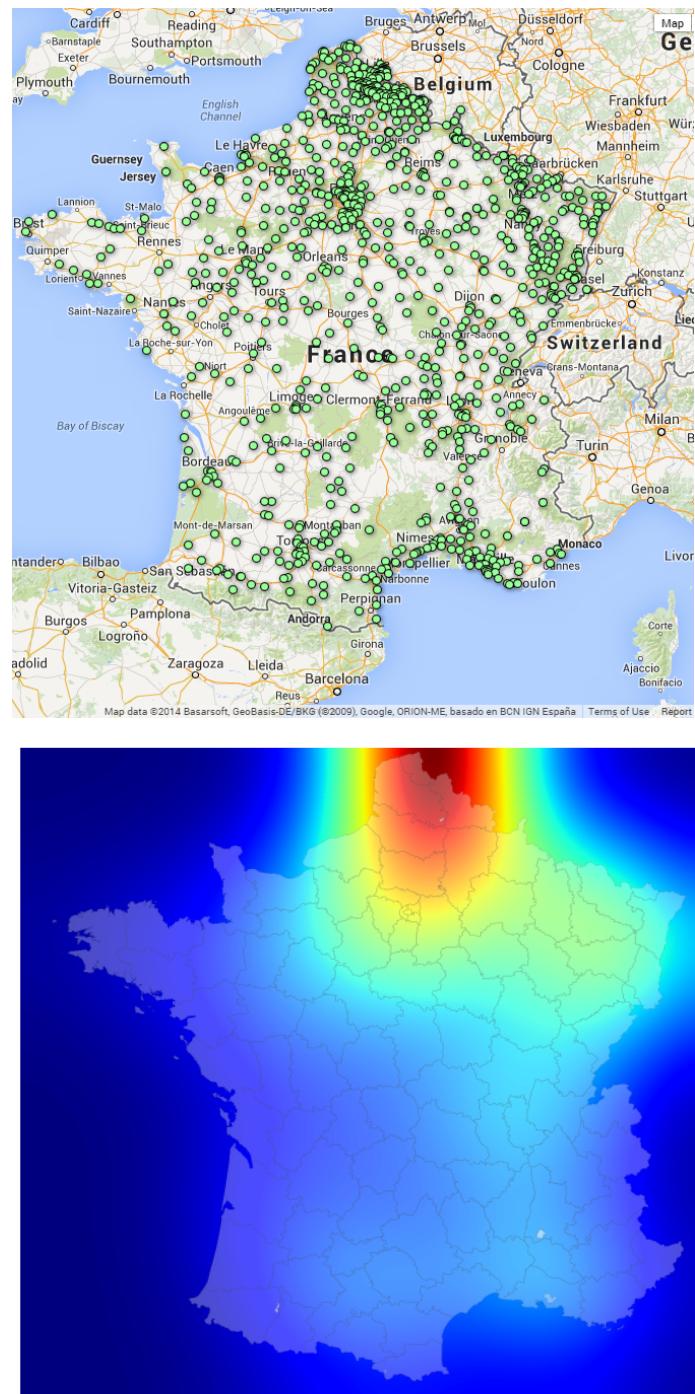


Figure 7: LECLERC

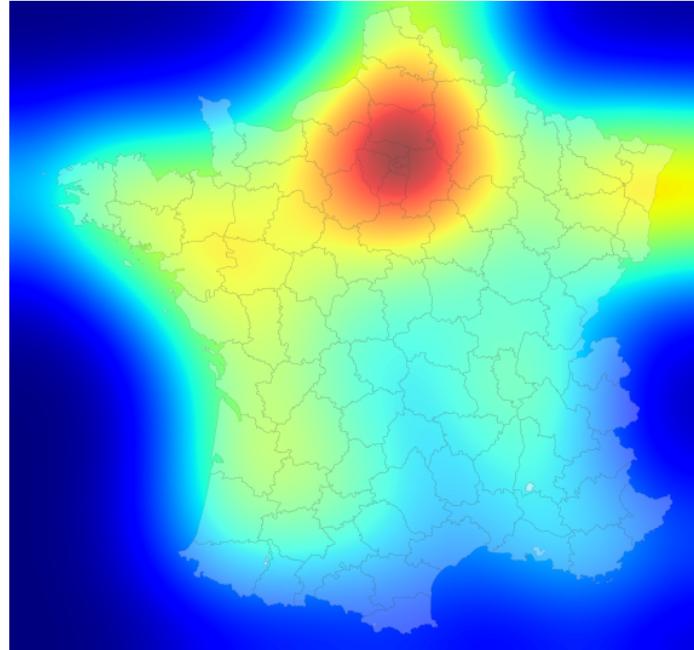
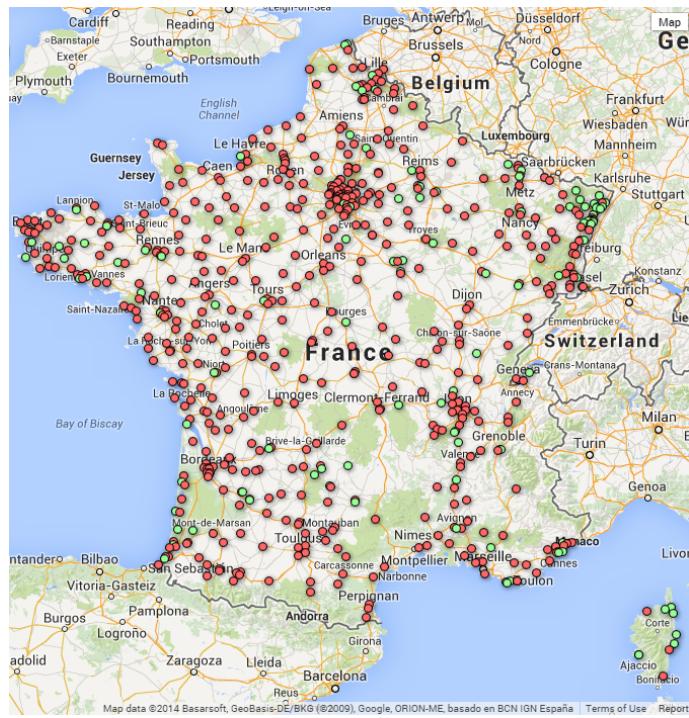


Figure 8: AUCHAN

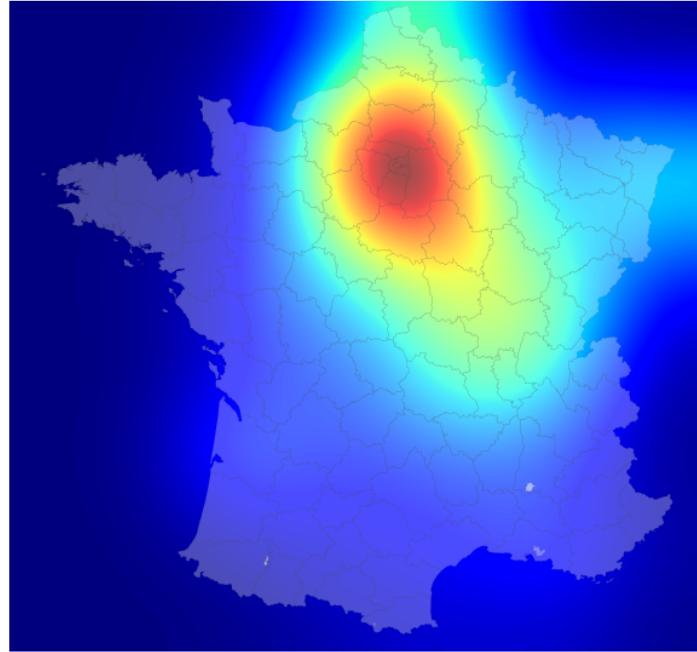
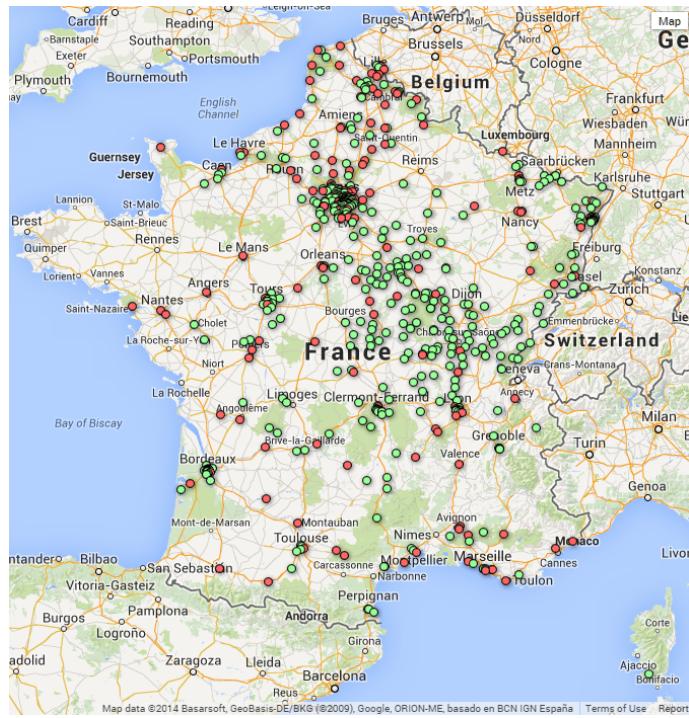


Figure 9: LOUIS DELHAIZE

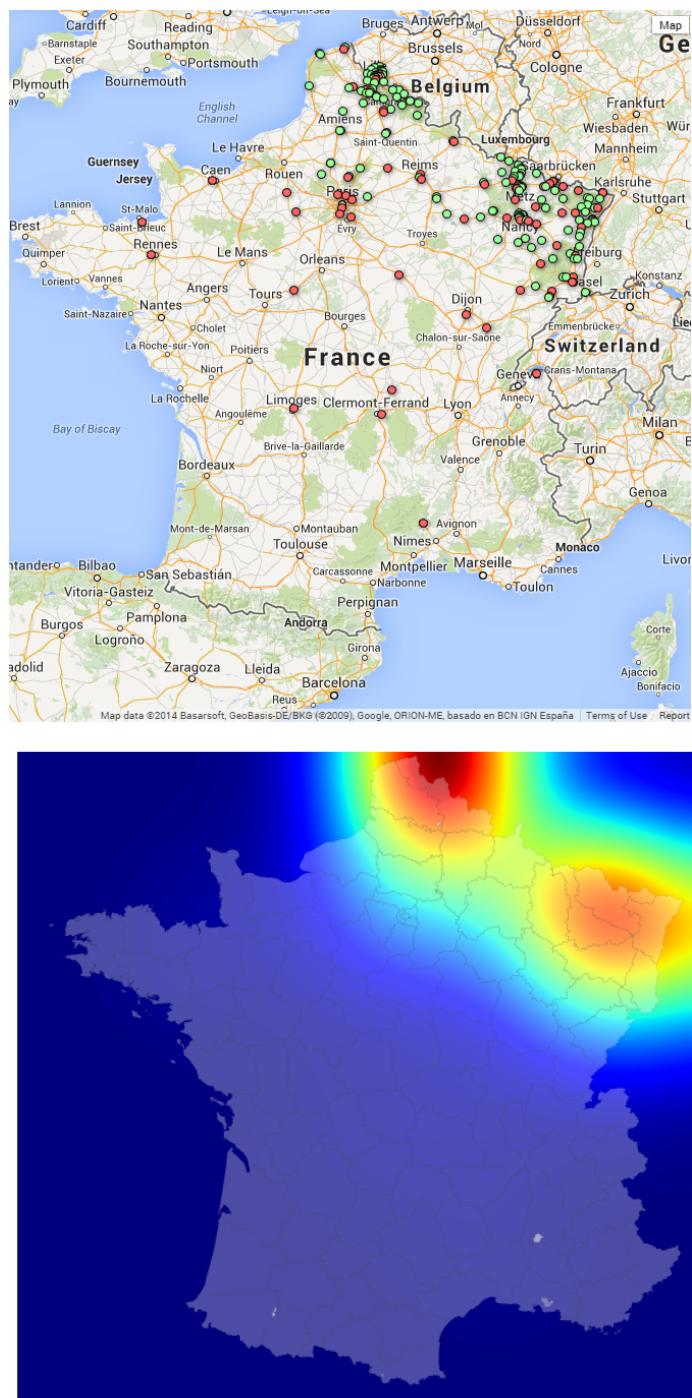


Figure 10: DIAPAR

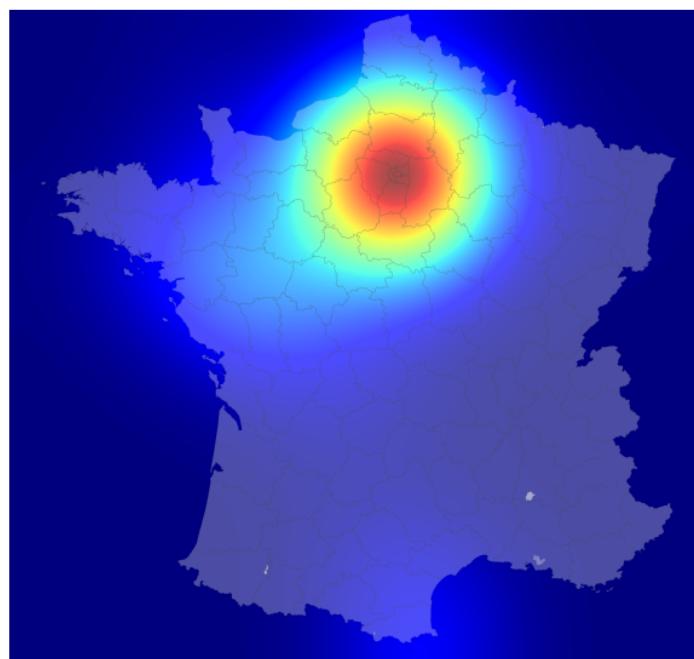
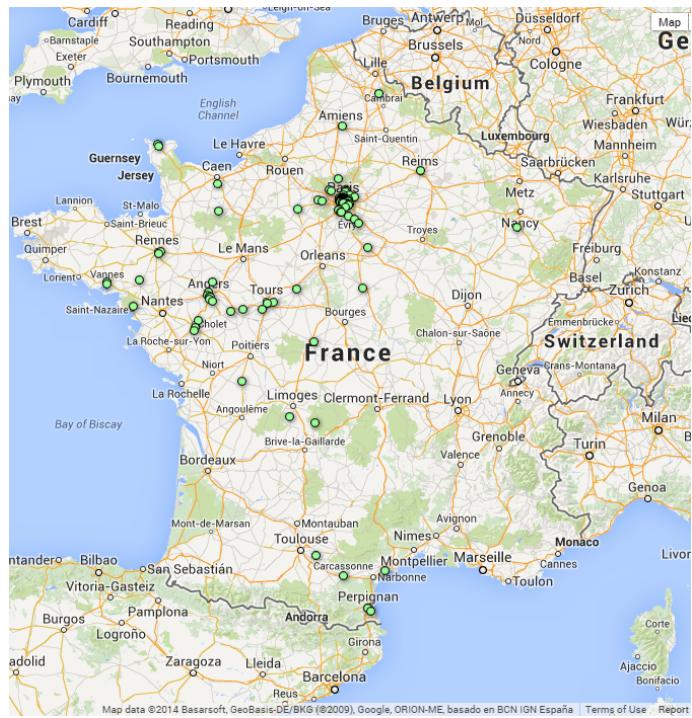


Figure 11: COLRUYT

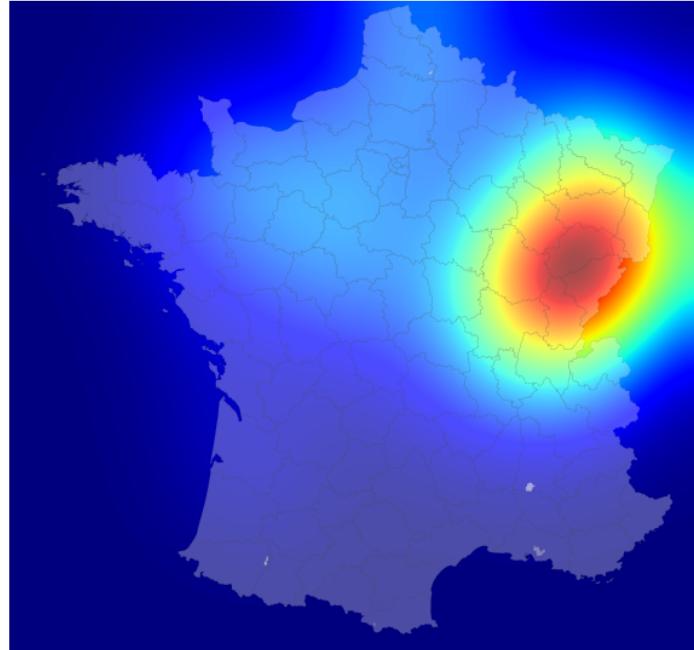
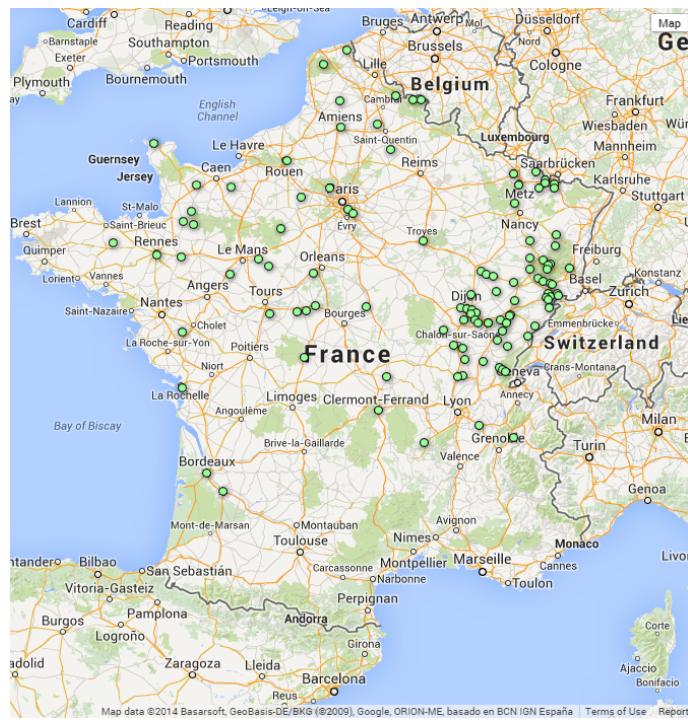
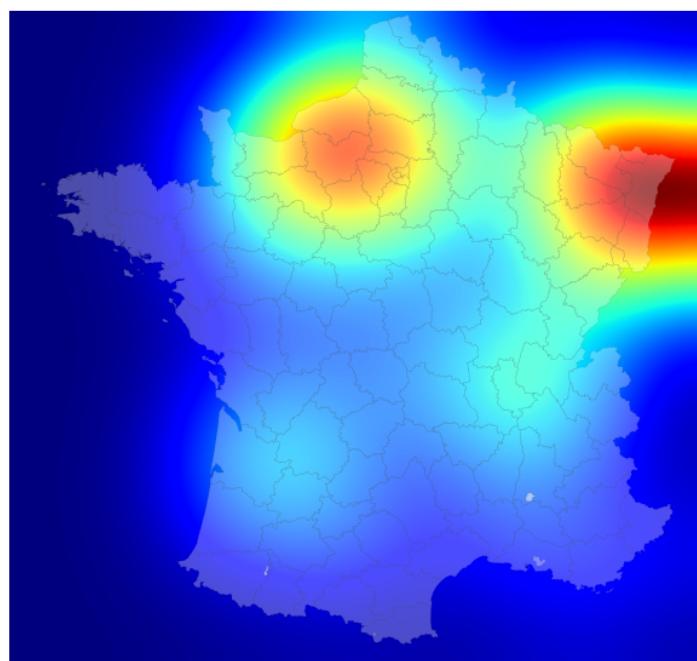
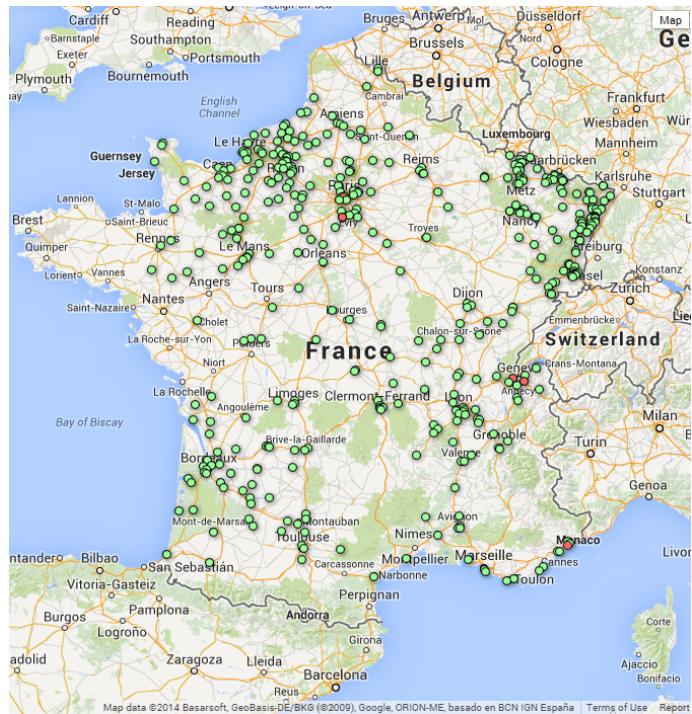


Figure 12: OTHER



## 5 Markets

Definition of market based on administrative limits.

### 5.1 Municipalities ("Communes")

There are 36,208 municipalities in Metropolitan France, with a total population of 62.5 million inhabitants (Census 2010). Only 4,864 municipalities have a grocery store (hard discount or supermarket with surface above  $400m^2$ ). This leaves 28.7% of the population living in municipalities devoid of grocery store.

Table 9: Top 20 "Aires urbaines" by population

Area Name	Pop (th)	Size (th km <sup>2</sup> )	Pop density	Nb GS	Pop (th) by Nb GS	Cum GS Surf (th m <sup>2</sup> )	Pop by GS m <sup>2</sup>
Paris	2,244	105	21,289	459	4.89	363	6.18
Marseille	851	241	3,536	118	7.21	204	4.17
Lyon	484	48	10,118	70	6.92	81	5.98
Toulouse	442	118	3,735	47	9.40	85	5.21
Nice	343	72	4,773	55	6.24	81	4.22
Nantes	285	65	4,371	32	8.91	66	4.29
Strasbourg	272	78	3,473	44	6.18	59	4.58
Montpellier	257	57	4,524	30	8.58	57	4.53
Bordeaux	239	49	4,845	28	8.54	63	3.80
Lille	228	35	6,533	32	7.11	59	3.88
Rennes	207	50	4,111	26	7.97	53	3.92
Reims	180	47	3,838	30	6.00	54	3.35
Le Havre	175	47	3,738	24	7.31	44	3.96
Saint-Étienne	171	80	2,142	23	7.45	40	4.26
Toulon	165	43	3,841	23	7.15	30	5.43
Grenoble	156	18	8,585	23	6.77	24	6.58
Dijon	151	40	3,742	17	8.89	39	3.87
Angers	148	43	3,455	18	8.20	55	2.66
Villeurbanne	145	15	9,997	15	9.68	17	8.69
Le Mans	143	53	2,701	26	5.49	54	2.66

## 5.2 Areas in terms of urbanism ("Unites urbaines")

Based on residential areas (c. 2300): area with no discontinuity in housing of 200m or more and more than 2000 inhabitants.

Table 10: Top 20 "Unites urbaines" by population

Area Name	Pop (th)	Size (th km <sup>2</sup> )	Pop density	Med rev (th eur)	Nb GS	Pop (th) by Nb GS	Cum GS Surf (th m <sup>2</sup> )	Pop by GS m <sup>2</sup>
Paris	10,460	2,845	3,677	21.61	1,667	6.27	2,550	4.10
Marseille - Aix	1,560	1,732	901	18.38	241	6.47	453	3.44
Lyon	1,551	1,178	1,317	20.23	214	7.25	386	4.02
Lille (fr)	1,018	443	2,301	17.50	171	5.96	342	2.98
Nice	942	744	1,266	19.64	160	5.89	260	3.62
Toulouse	880	812	1,084	21.07	138	6.37	305	2.88
Bordeaux	843	1,173	719	20.59	132	6.39	307	2.75
Nantes	591	538	1,100	20.51	81	7.30	212	2.79
Toulon	558	764	730	19.04	102	5.47	181	3.09
Douai - Lens	508	485	1,047	14.47	130	3.91	214	2.38
Grenoble	497	512	970	20.38	74	6.72	143	3.47
Rouen	464	453	1,023	18.46	89	5.21	176	2.63
Strasbourg (fr)	450	240	1,873	18.53	75	6.00	130	3.45
Avignon	442	1,369	323	17.01	96	4.61	172	2.57
Montpellier	391	310	1,261	18.80	63	6.21	145	2.69
Saint-Étienne	371	419	887	17.02	59	6.29	122	3.05
Béthune	353	752	469	16.11	94	3.75	137	2.58
Tours	346	664	521	19.48	64	5.41	142	2.43
Valenciennes (fr)	335	440	761	14.25	78	4.29	125	2.69
Rennes	311	284	1,092	20.62	47	6.61	117	2.65

## 5.3 Areas in terms of employment ("Aires urbaines")

Based on employment (c. 700): a pole with at least 10,000 jobs and each municipality in the pole must have at least c.40% of its occupied inhabitants working in the pole or in municipalities attracted by the pole.

Table 11: Top 20 "Aires urbaines" by population

Area Name	Pop (th)	Size (th km <sup>2</sup> )	Pop density	Med rev (th eur)	Nb GS	Pop (th) by Nb GS	Cum GS Surf (th m <sup>2</sup> )	Pop by GS m <sup>2</sup>
Paris	12,223	17,174	712	21.76	1,973	6.20	3,141	3.89
Lyon	2,166	6,019	360	20.09	299	7.24	533	4.06
Marseille - Aix	1,718	3,174	541	18.76	267	6.44	484	3.55
Toulouse	1,232	5,381	229	20.73	208	5.92	408	3.02
Lille (fr)	1,158	926	1,251	18.08	197	5.88	379	3.06
Bordeaux	1,128	5,613	201	20.13	190	5.94	404	2.79
Nice	1,001	2,585	387	19.64	165	6.07	267	3.75
Nantes	873	3,302	264	19.93	119	7.34	291	3.00
Strasbourg (fr)	761	2,198	346	20.07	140	5.44	248	3.07
Grenoble	670	2,621	255	20.69	97	6.90	179	3.75
Rennes	672	3,747	179	19.84	109	6.16	223	3.02
Rouen	653	2,367	276	19.07	115	5.68	218	3.00
Toulon	607	1,196	508	19.09	112	5.42	196	3.10
Douai - Lens	543	679	800	14.77	134	4.05	217	2.50
Montpellier	549	1,673	328	19.18	81	6.78	173	3.17
Avignon	511	2,083	245	17.28	104	4.92	179	2.85
Saint-Étienne	509	1,689	301	17.69	77	6.61	150	3.39
Tours	477	3,184	150	19.44	84	5.68	172	2.77
Clermont-Fer.	464	2,420	192	19.76	83	5.59	162	2.87
Nancy	435	2,367	184	19.62	79	5.51	152	2.85

## A "Drive-through"

Table 12: Drive: Surface in  $m^2$  by type

	#Total	#Avail.	Min	Q05	Med	Avg	Q95	Max	Cum
Drive in	2,046	247	10	54	1,500	1,395	2,500	3,900	344,576
Drive	435	435	100	555	1,800	1,801	3,000	7,500	783,614
All	2,481	682	10	252	1,600	1,654	2,897	7,500	1,128,190