French Road safety Observatory

February the 16th of 2015.

Etalab - Road traffic accidents database

Any road traffic accident (as to say an accident taking place on a public or private road opened to public traffic, involving at least one vehicle and at least one victim requiring medical care¹), is the subject of a BAAC (analysis report of road accidents involving physical injury) completed by the competent police forces or the gendarmerie, according to the place of the accident. All these reports constitute the road traffic accidents national database.

An annual database is extracted from the road traffic accidents national database, or « BAAC reports² », administrated by the ONISR.

This database lists all the road traffic accidents that happened in France during the calendar year (mainland and overseas departments, as to say Guadeloupe, Guyane, Martinique, La Réunion and Mayotte), with a simplified description. This includes informations about the accident localisation as reported, and informations about the accident characteristics, its place, the vehicles involved and the victims.

Compared to the 2006-2011 database currently available in ETALAB, this database is annual and divided into four sections (reports): characteristics, places, vehicles, users.

Nevertheless, the database does not give data about users and vehicles nor their attitude. Report them might infringe on easily recognizable physical persons or might reveal some people behavior when disclose it might harm them (CADA advice – 2012, January the 2nd).

The validity of the use of statistics made from the database depends on the specific checking ways of road safety application area and particularly on a precise knowledge of the definitions concerning each used variable. For every data mining, it is important to be aware of the joined DATA report structure in particular as well as the user guide for codifying the analysis report of road traffic accidents.

Let us remind that many indicators extracted from the database have been certified by the Public statistics Authority (June, the 4th of 2013 decree).

Database specifications

Etalab database for 2012 road traffic accidents is divided into 4 sections. Each of them is a file in csv or xls format (for the characteristics report intitled « characteristics »).

- 1. The CARACTERISTICS section describes the general circumstances of the accident.
- 2. The **PLACES** section: there can be many in the case of intersections.

Exact definitions, and every useful detail about the and the gestion of the accidents report are appended to the Road Safety annual Report published by the ONISR, also available via Etalab and on the ONISR web pages.

According to a former designation: « Bulletins d'Analyse des Accidents Corporels » (BAAC).

1

- 3. The involved **VEHICLES** section
- 4. The involved users section

Each of the variables contained in a section must be linked to the other sections variables. For exemple, it can be necessary to know the vehicles where were the users at the accident time and on which kind of way these vehicles were driving. The accident ID number (Cf. "Acc_num") present in these four sections make possible to establish a link between all the variables describing an accident.

Etalab is a raw database. A correcting processus is undertook later for uncorrected typing errors.

Most of the variables contained in the four previously enumerated can have empty cells or a zero or a point. In all three cases, it is about a non informed cell or a purposeless one.

Attention: all the accidents are not precisely geo localized through the available informations in the BAAC report and restored here. *A minima*, only the city name is given.

Database users are invited to report us by mail any error noticed during their operations.

An accident can be geo localized by many ways :

- No standardized partial adress
- · GPS coordinates
- Road number, Marker post (km plus distance to the marker post in metres)

Criteria complete list with detail of the contents for each report :

CHARACTERISTICS SECTION

Num Acc

Accident identification number

jour

Day of the accident

mois

Month of the accident

an

Year of the accident

hrmn

Hour and minute of the accident

lum

Accident light conditions

dep

County: INSEE (National Institute of Statistics and Economic Studies) county code followed by 0 (201 Haute Corse - 202 Corse du Sud)

com

The city number is a code given by INSEE. The code contains 3 figures set to the right hand side of the window.

loc

Location:

- 1 Outside built up areas
- 2 From 0 to 500 inhabitants
- 3 From 501 to 2000 inhabitants

- 4 From 2001 to 5000 inhabitants
- 5 From 5001 to 20000 inhabitants
- 6 From 20001 to 50000 inhabitants
- 7 From 50001 to 100000 inhabitants
- 8 From 100001 to 300000 inhabitants
- 9 More than 300 000 inhabitants

int

Intersection:

- 1 Outside of intersection
- 2 In X
- 3 In T
- 4 In Y
- 5 With more than four roads
- 6 Roundabout
- 7 Square
- 8 Level crossing
- 9 Other

atm

Weather conditions:

- 1 Normal
- 2 Light rain
- 3 Heavy rain
- 4 Snow hail
- 5 Fog smoke
- 6 Strong wind storm
- 7 Sunny weather
- 8 Overcast
- 9 Other

col

Type of collision:

- 1 Two vehicles frontal
- 2 Two vehicles roar
- 3 Two vehicles side
- 4 Three vehicles and more in series
- 5 Three vehicles and more multiple collisions
- 6 Other collision
- 7 Without collision

adr

Postal adress: data informated about the accidents occuring in built-up areas

gps

GPS Code:

Origin indicator 1 character:

M = Mainland

A = Antilles (Martinique or Guadeloupe)

G = Guyane

R = Réunion

Y = Mayotte

Geographical coordinates in decimal degrees :

lat : Latitude long : Longitude

LOCATION SECTION

Num Acc

Accident number identical to the « CARACTERISTICS section » file referred in the accident.

codr

Road code: allows to connect involved vehicle(s) to the road where they were driving. Roads are enumerated in the continuation (1,2,3, etc.).

catr

Road category:

- 1 Motorway
- 2 -National road
- 3 Departemental road
- 4 Communal road
- 5 Outside public network
- 6 Car open to public traffic
- 9 Other

voie

Road number

v1

Index letter (exemple: Bis - 2, Ter - 3, etc)

v2

Identification of the road (number/letter)

circ

Traffic system road:

- 1 One way
- 2 Two-way
- 3 Dual carriageway
- 4 With variable lane allocation

nbv

Total number of traffic lanes

vosp

indicates the existence of special paths, independently of the fact that the accident had or not occurred on such ways.

- 1 Cycling path
- 2 Cycling lane
- 3 Reserved path

prof

In length profile describes the road slop at the accident place.

pr

Marker post attachment number

pr1

Distance en mètres au PR (par rapport à la borne amont)

plan

Horizontal alignment:

- 1 Rectilinear part
- 2 Left curve
- 3 Right curve
- 4 In « S »

lartpc

Central reserve width if existing

larrout

Width of the road assigned to the vehicles traffic. Hard shoulders, Central reserve and parking places are not included.

surf

infra

Infrastructure management:

- 1 Underground tunnel
- 2 Bridge Flyover
- 3 Interchange or link road
- 4 Railway track
- 5 Engineered intersection
- 6 Pedestrian zone
- 7 Toll zone

situ

Accident location:

- 1 On carriageway
- 2 On hard shoulder
- 3 On verge
- 4 On pavement
- 5 On cycling path

env1

Schools: near a school

Vehicles section:

Num Acc

Accident number similar to the report « characteristics section » used for all described vehicle involved in the accident.

letco (Lettre conventionnelle)

Conventional letter (vehicles) enables to differenciate, in alphabetical order from A to Z, the vehicles involved in the accident.

codr

Highway traffic legislations: enables to connect the vehicle(s) involved to the road where it was/they were driving. Roads are listed one after the other (1, 2, 3, etc...)

senc

Direction of traffic:

- 1 Increasing marker post
- 2 Decreasing marker post

catv

Vehicle category:

- 01 Bicycles
- 02 Moped <50cm3
- 03 Licence-free car
- 04 No more used reference since 2006 (registered scooter)
- 05 No more used reference since 2006 (motorcycle)
- 06 No more used reference since 2006 (side-car)
- 07 Light vehicle alone
- 08 More used category (LV + travel trailer)
- 09 More used category (LV + trailer)
- 10 LGV alone 1,5T <= PTAC <= 3,5T with or without trailer (formerly LGV alone 1,5T <= PTAC <= 3,5T)
- 11 No more used reference since 2006 (LGV (10) + travel trailer)
- 12 No more used reference since 2006 (LGV (10) + trailer)
- 13 HG alone 3,5T <PTCA <= 7,5T
- 14 HG alone > 7,5T
- 15 HG alone > 3,5T + trailer
- 16 Tractor unit alone
- 17 Tracteur unit + semitrailer
- 18 No more used reference since 2006 (public transportation)
- 19 No more used reference since 2006 (tramway)

- 20 Special vehicle
- 21 Agricultural tractor
- 30 Scooter < 50 cm3
- $31 Motorcycle > 50 cm^3 et <= 125 cm^3$
- 32 Scooter > 50 cm³ et <= 125 cm³
- 33 Motorcycle > 125 cm³
- 34 Scooter > 125 cm³
- 35 Quad <= 50 cm³
- 36 Quad> 50 cm3
- 37 Bus
- 38 Coach
- 39 Train
- 40 Tramway
- 99 Other

obs

- 1 Parked vehicle
- 2 Tree
- 3 Metal safety fence
- 4 Concrete safety fence
- 5 Other safety fence
- 6 Building, wall, bridge pile
- 7 Vertical signal support or emergency telephone
- 8 Post
- 9 Street furniture
- 10 Parapet
- 11 Traffic island, refuge, bollard (borne haute)
- 12 Side of the pavement
- 13 Ditch, rubble, rock wall
- 14 Other fixed object on carridgeway
- 15 Other fixed object on the pavement or the shoulder
- 16 Exit from carridgeway with no obstacle

obsm

Mobile object hit:

- 1 Pedestrian
- 2 Vehicle
- 4 Vehicle on rails
- 5 Domestic animal
- 6 Wild animal
- 9 Other

choc

Point of initial impact:

- 1 Front
- 2 Front right
- 3 Front left
- 4 Rear
- 5 Rear right
- 6 Rear left
- 7 Side right
- 8 Side left
- 9 Multiple impacts (overturning)

manv

Main movements before the accident :

- 1 Without changing direction
- 2 Same direction same queue
- 3 Between two lanes
- 4 In reverse
- 5 The wrong way
- 6 By encroaching on the central reserve
- 7 In the bus lane in the same direction
- 8- In the bus lane in the opposite direction
- 9 By joining traffic
- 10 By turning round on the carriageway

Changing lane

- 11 To the left
- 12 To the right

Moving

- 13 To the left
- 14 To the right

Turning

- 15 To the left
- 16 To the right

Passing

- 17 To the left 18 To the right

Diverse

- 19 Crossing the carriageway
- 20 Parking manœuvre
- 21 Avoiding manœuvre
- 22 Opening door
- 23 Stopping (appart from parking)
- 24 Parking (with occupants)

occutc

Number of the public transportation users

ETALAB REPORT USERS 2012

Num Acc

Accident number similar to « Etalab accidents 2012 » report, used for every described users involved in the accident.

Letco (Lettre conventionnelle)

Rank of the vehicule involved where the user is.

Enables to localize the place occuped by the user in the vehicle at the accident time.

catu

User category:

- 1 Driver
- 2 Passenger
- 3 Pedestrian
- 4 Pesdestrian on roller skates or scooter

grav

Accident gravity: injured users are classified into three category of victimes plus unhurt people.

- 1 Unhurt
- 2 Killed (30 days)
- 3 injured + hospitalized
- 4 Slightly injured

sexe

User's gender

An nais

User's year of birth

trajet

Travel purpose Motif du déplacement at the accident time :

1 – Commuting (to/from work)

- 2 Commuting (to/from school)
- 3 Shopping
- 4 Professional use
- 5 Leisure
- 9 Other

secu

On 2 characters:

The first one is about the existence of a safety equipment:

- 1 Safety belt
- 2 Helmet
- 3 Child seat
- 4 Reflective equipment
- 9 Other

The second one is about the use of the safety equipment:

- 1 Yes
- 2 No
- 3 Undertermined

locp

pedestrian localization:

On the road:

- 1 At + 50 m from the pedestrian crossing
- 2 A 50 m from the pedestrian crossing

On the pedestrian crossing:

- 3 Without light signals
- 4 With light signals

Various:

- 5 On the pavement
- 6 On shoulder or hard shoulder
- 7 On refuge or hard shoulder
- 8 on side lane

actp

Action moving:

- 1 Direction of vehicle hit
- 2 Reverse direction of vehicle

Various:

- 3 Crossing
- 4 Masked
- 5 Playing, running
- 6 With animal
- 7 Others

etatp

This variable enables to precise if the injured pedestrian was on his own or not.

- 1 Alone
- 2 Accompanied
- 3 In a group