Diagnosis

Diagnosis				
Attribute	Description	Data type		
coodX	Position of the tree, X coordinates in Lambert 93 CC45 system.	Float (1911906.64842 < x < 1916251.74252)		
coordY	Position of the tree, Y coordinate in Lambert 93 CC45 system.	Float (4220467.21877 < y < 4226533.85288)		
stationId	The identifier of the station of the tree.	1157 possible String values ('ESP065'/'ESP151'/'ESP174'/'ESP187')		
sector	The sector of Grenoble the tree is located in.	Integer (1-6)		
closestTrainStation	The minimal of the maximal temperatures of Grenoble.	Float		
closestIndustrialZone	Distance between the diagnosed tree and an industrial zone.	Float		
closestParking	Distance between the diagnosed tree and a parking.	Float		
closestRiver	Distance between the diagnosed tree and a train river.	Float		
closestMotorways	Distance between the diagnosed tree and a motorway.	Float		
closestMall	Distance between the diagnosed tree and a mall.	Float		
closestRoads	Distance between the diagnosed tree and a road.	Float		
environmentTypeCode	The identifier of the category that describes where the tree is planted.	Four possible string values : 'Arbre de voirie'/'Bois semi naturel'/'Arbre d'espaces ouverts'/'Arbre d'enceintes fermées'		
environmentTypeDesc	Category that describes where the tree is planted.	String ('ESP065'/'ESP151'/'ESP174'/'ESP187')		
distanceToPollutionStation	Distance between the diagnosed tree and a pollution station.	Float		
idPollutionStation	The identifier of the pollution station which takes measures of the air.	Integer		
species	The species of the tree.	String ('Cordata', 'Japonica')		
genus	The botanical type of the tree	String ('Alnus', Platanus')		
seedingYear	The year the tree was planted on.	Integer (2004-2015)		
fiveYearPeriod	Set of five consecutive years	Integer (2000-2004 \rightarrow 2000), the first year of the set		
isLast	Whether this diagnosis is the last that was done for the diagnosed tree.	Boolean (true/false)		
diagnosisYear	The year of this diagnosis.	Year (2011-2015)		
fiveYearPeriod	Set of five consecutive years	Integer (2000-2004 \rightarrow 2000), the first year of the set		
diagnosisNote	The result of this diagnosis.	String ('Arbre d'avenir normal', Arbre d'avenir incertain', 'Arbre à abatre dans les 5 ans')		
developmentStatus	Developement status of the tree when it was diagnosed.	String ('Arbre jeune', 'adulte', 'vieillissant')		
sidewalkProximity	Defines whether the tree is near a sidewalk.	Boolean (true/false)		
environmentBusyness	Describes how busy the nearby environment of the tree is.	String ('passages fréquents et arrêts fréquents'/'passages fréquents ou arrêts'/'quelques passages')		
vigor	How good looking the tree is.	String ('vigoureux'/'vieillissement dépérissement'/'vigueur intermédiaire')		
stumpDiameter	The intervall of the diameter of the tree's stump.	String ('10 à 20 cm')		
stumpDiameterGroup	Set of stump diameter by intervals of 50 cm	Integer (1-2 ex : 10 à 20 cm → 1, 50 à 60 cm → 2)		
		R: root, T: trunk, C: collar, K: crown, x: not sick on this part		
diseases	Four caracters that describe all possible combinations of sickness.	16 possible values : xxxx, xxxK, xxCx, xTxx, Rxxx, xxCK, xTxK, xTCx, xTCK, RxxK, RxCx, RxCK, RTxx, RtxK, RTCx, RTCK		
quantity	Attribute used for counting the number of diagnosis.	Number equal to 1		
diseases	Attribute used for counting the number of sick trees.	Number equal to 1 when the tree has an imperfection on one of its parts else equal to 0		
diseaseOnRoot	Whether the tree has an imperfection on its roots.	Number equal to 1 when the tree has an imperfection on its roots else equal to 0		
diseaseOnTrunk	Whether the tree has an imperfection on its trunk.	Number equal to 1 when the tree has an imperfection on its trunk else equal to 0		
diseaseOnCollar	Whether the tree has an imperfection on its collar.	Number equal to 1 when the tree has an imperfection on its collar else equal to 0		
diseaseOnCrown	Whether the tree has an imperfection on its crown.	Number equal to 1 when the tree has an imperfection on its crown else equal to 0		

Pollution

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Attribute	Description	Data type
idPollutionStation	The identifier of the pollution station which takes measures of the air.	Integer
pollutionStationName	The name of the pollution station.	String ('Grenoble Rocade Sud',)
monthYear	The month and year when the measures has been taken.	String ('janv-04')
year	The year when the measures has been taken.	Integer (2004-2015)
fiveYearPeriod	Set of five consecutive years	Integer (2000-2004 \rightarrow 2000), the first year of the set
nitrogenDioxide	The minimal of the maximal temperatures of Grenoble.	Float
nitrogenOxide	The quantity of nitrogen oxide in the air in micrograms by cube meter.	Float
ozone	The quantity of ozone in the air in micrograms by cube meter.	Float
pm10	The quantity of the particules PM10 in the air in micrograms by cube meter.	Float
benzene	The quantity of benzene in the air in micrograms by cube meter.	Float
benz(a)anthracene	The quantity of benz(a)anthracene in the air in micrograms by cube meter.	Float
benz(a)pyrene	The quantity of benz(a)pyrene in the air in micrograms by cube meter.	Float
benz(b)fluoranthene	The quantity of benz(b)fluoranthenein the air in micrograms by cube meter.	Float
benz(j)fluoranthene	The quantity of benz(j)fluoranthene in the air in micrograms by cube meter.	Float
benz(k)fluoranthene	The quantity of benz(k)fluoranthene in the air in micrograms by cube meter.	Float
dibenzo(a,h)anthracene	The quantity of dibenzo(a,h)anthracene in the air in micrograms by cube meter.	Float
indeno(1,2,3-cd)pyrene	The quantity of indeno(1,2,3-cd)pyrene in the air in micrograms by cube meter.	Float
pm2,5	The quantity of the particules PM2,5 in the air in micrograms by cube meter.	Float
toluene	The quantity of toluene in the air in micrograms by cube meter.	Float
antimony	The quantity of antimony in the air in micrograms by cube meter.	Float
arsenic	The quantity of arsenic in the air in micrograms by cube meter.	Float
barium	The quantity of barium in the air in micrograms by cube meter.	Float
cadmium	The quantity of cadmium in the air in micrograms by cube meter.	Float
chrome	The quantity of chrome in the air in micrograms by cube meter.	Float
cobalt	The quantity of cobalt in the air in micrograms by cube meter.	Float
copper	The quantity of copper in the air in micrograms by cube meter.	Float
sulfurDioxide	The quantity of sulfur dioxide dioxide in the air in micrograms by cube meter.	Float
ethylbenzene	The quantity of ethylbenzene in the air in micrograms by cube meter.	Float
m+p-xylene	The quantity of m+p-xylene in the air in micrograms by cube meter.	Float
manganese	The quantity of manganese in the air in micrograms by cube meter.	Float
mercury	The quantity of mercury in the air in micrograms by cube meter.	Float
nickel	The quantity of nickel in the air in micrograms by cube meter.	Float
o-xylene	The quantity of o-xylene in the air in micrograms by cube meter.	Float
lead	The quantity of lead in the air in micrograms by cube meter.	Float
thallium	The quantity of thallium in the air in micrograms by cube meter.	Float
vanadium	The quantity of vanadium in the air in micrograms by cube meter.	Float
zinc	The quantity of zinc in the air in micrograms by cube meter.	Float

Weather

Attribute	Description	Data type
monthYear	The month and year when the measures has been taken.	String ('janv-04')
year	The year when the measures has been taken.	Year (2004-2015)
fiveYearPeriod	Set of five consecutive years	Integer (2000-2004 \rightarrow 2000), the first year of the set
maximalMaxTemp	The maximal of the maximal temperatures of Grenoble.	Float
averageMaxTemp	The average of the maximal temperatures of Grenoble.	Float
minimalMaxTemp	The minimal of the maximal temperatures of Grenoble.	Float
averageTemp	The average of the temperatures.	Float
maximalMinTemp	The maximal of the minimal temperatures of Grenoble.	Float
averageMinTemp	The average of the minimal temperatures of Grenoble.	Float
minimalMinTemp	The minimal of the minimal temperatures of Grenoble.	Float
heatingDegreeDay	The measure of the heating cumsption	Float
sunDurationTime	The sun duration time in hour	Float
totalPrecipitation	Total rain precipitation in mm	Float
averagePrecipitation	Average rain precipitaion	Float
snow	The total of snow height on the floor	Float
maximumWindGust	Maximum wind gust in km/h	Float
maxPressure	The maximum pressure in Pa	Float
minPressure	The minimum pressure in Pa	Float