

The Effects of Weather and Human Factors on Malaria Outbreaks

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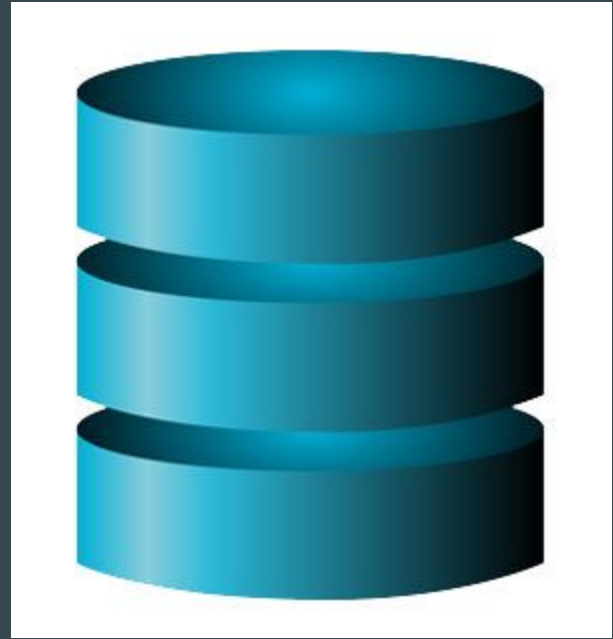
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Questions

- Is there a relationship between malaria outbreaks and weather data and/or human data?
- Assuming weather and human factors are involved with malaria outbreaks which attributes for each play the largest roles and, if possible to determine, which set of factors (weather or human) were more closely linked with malaria outbreaks?
- Is there a pattern or relationship within the data to suggest means to limit outbreaks of malaria and, as an extension, other infectious diseases?

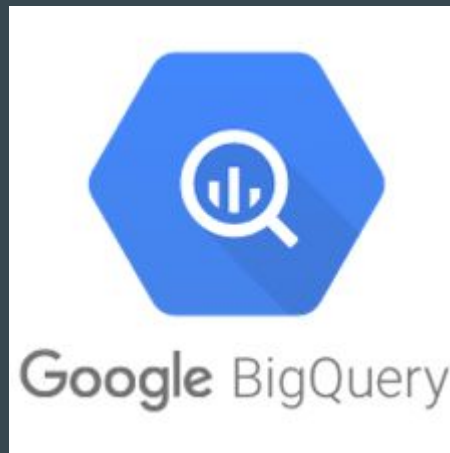
Data Pre-Processing and Cleaning

- Importing
- Remove duplicates
- Remove objects with missing data
- Down sampling
- Re-indexing



Tools

- Python
 - Pandas
 - Numpy
 - Scipy
 - Matplotlib
- BigQueryAPI



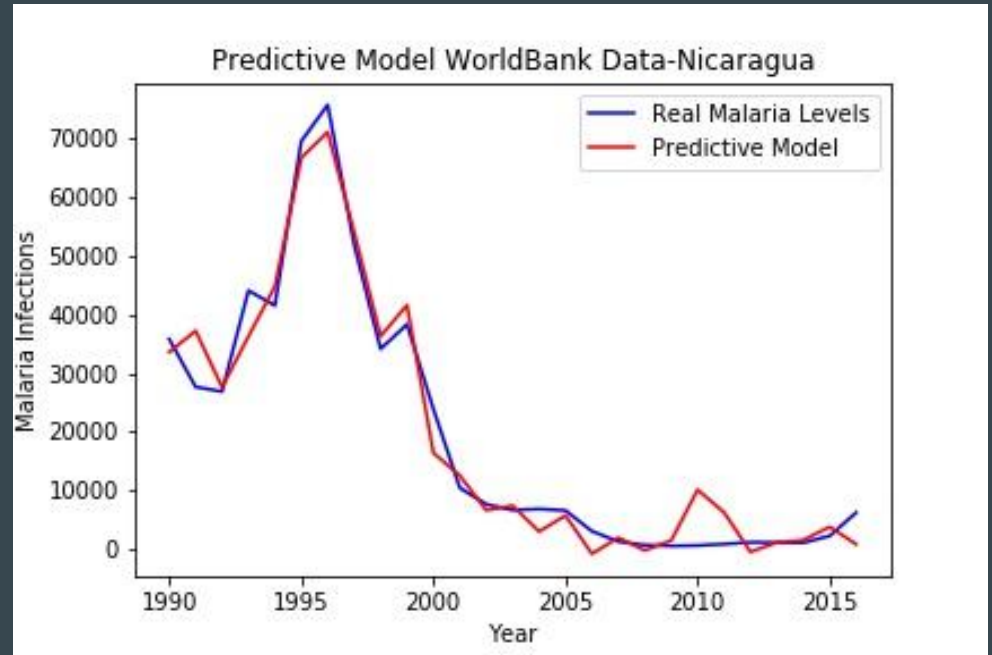
Classification and Clustering

OLS - multiple linear regression

OLS Regression Results			
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Dep. Variable:	Datum	R-squared:	0.981
Model:	OLS	Adj. R-squared:	0.970
Method:	Least Squares	F-statistic:	95.55
Date:	Wed, 01 May 2019	Prob (F-statistic):	9.02e-13
Time:	16:20:03	Log-Likelihood:	-260.80
No. Observations:	27	AIC:	541.6
Df Residuals:	17	BIC:	554.6
Df Model:	9		
Covariance Type:	nonrobust		
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Knowledge Gained

- Human Factors and Malaria
- Weather Factors and Malaria



Applications

