

# How to make better and accurate Weather Predictions

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### Abstract

It is a challenge today to study the climate change and minimize the energy savings. The ultimate goal is to provide the best judgement to satisfy the users. From the view point of bias, Neural Networks brings about greater accuracy.

### Introduction

The Weather forecasts are based on the data collected from the U.S national weather service The better forecasts are predicted from the data collected by the weather channel. If the supercomputers improve in resolution, the weather predictions will become accurate. Accurate forecasts helps in optimizing the staff in the various areas of business and sectors industry.

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[4] [1] [6] [5] [2]

### Data Description

The dataset is from the smart cities data. The different components of the Weather data are Dew-point, Humidity, Pressure, Temperature, Wind speed and Wind direction. The data about the different attributes are used to train and test different models.

### Methods

The most widely applied Machine learning technique is the PCA. The greatest factor which is used in studying weather conditions is the solar radiation. Weather forecasting is a challenging task since Weather is a data intensive and continous process.

### Results

Weather forecasts has led to safe transportation,productivity and resilience. There will be more benefits to the individuals,if the weather forecasting techniques are improved. Researches have developed a Radar which predicts the Weather more accurately. Weather forecasting has led to safe transportation, productivity and resilience.

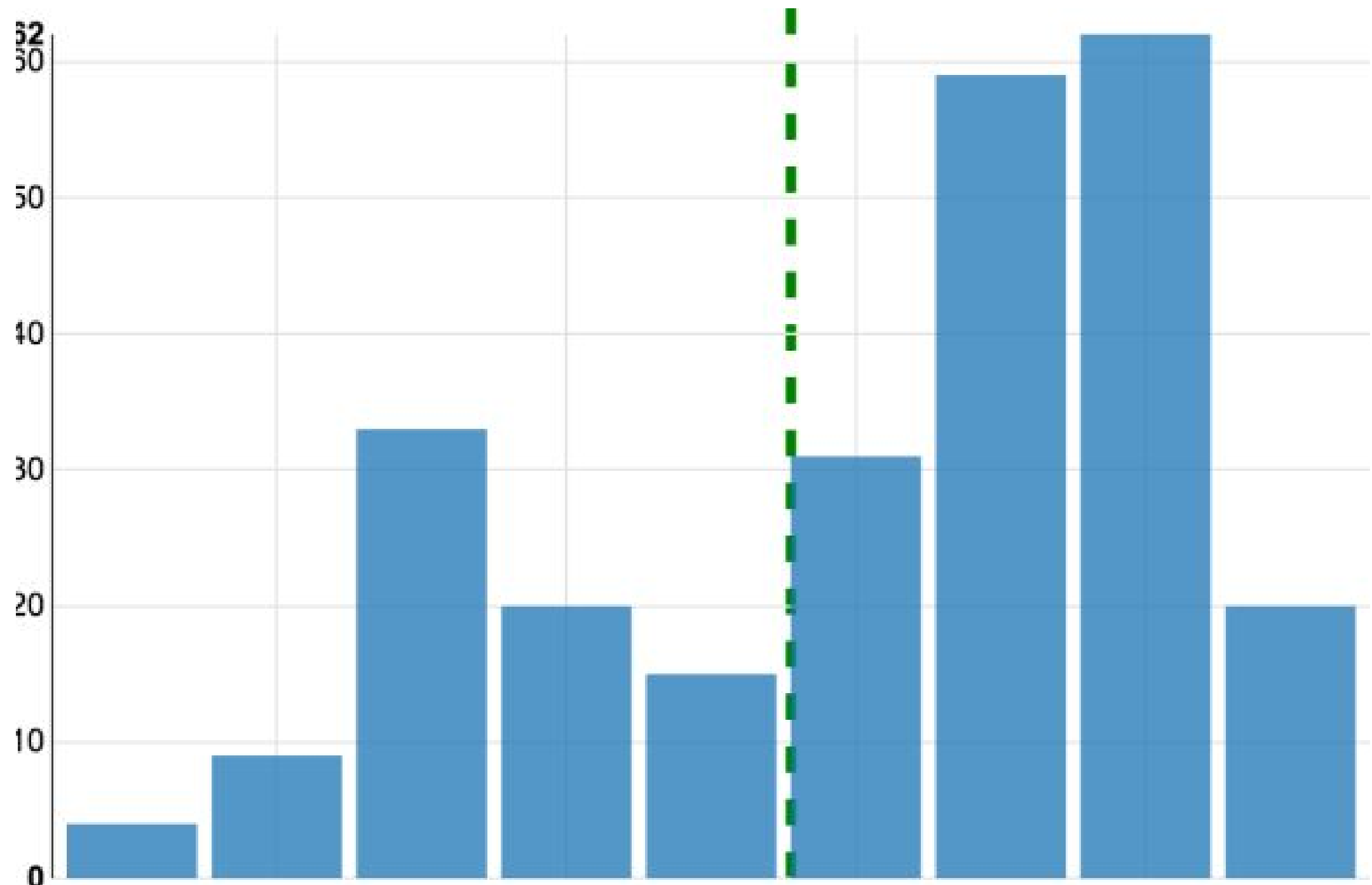


Figure 1: Dewpoint and Humidity relation

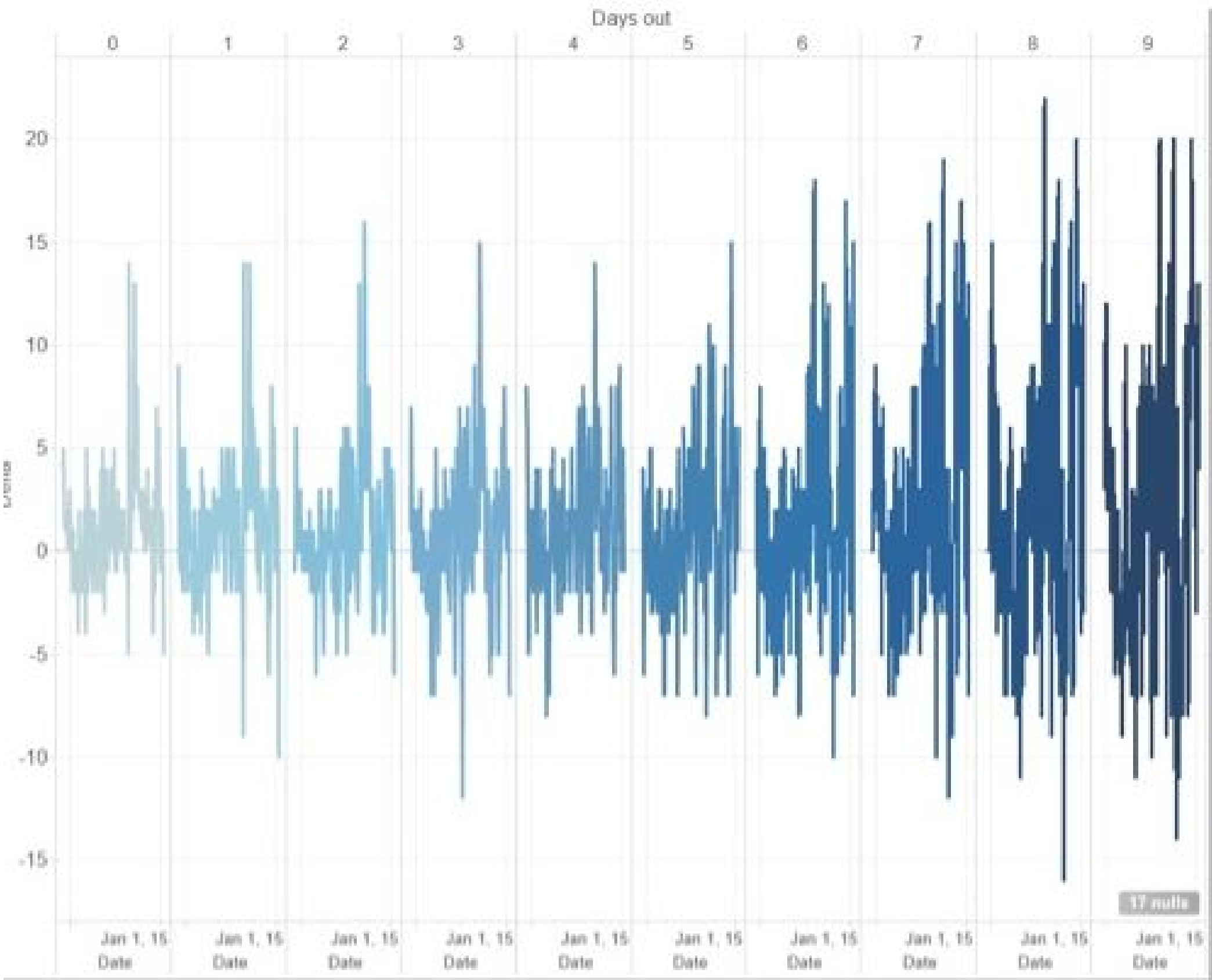


Figure 2: predictions of Weather

### Conclusions

Weather forecasting may undermine peoples ability in the day to day activities. Businesses like Wal-mart, JPMorgan Chase have developed their own statistical models to predict extreme weather conditions.The very large Weather changes can pose very little risk, if they are predicted well. The artificial Neural Networks has advantages over the linear combination. Accurate forecasts are produced by the Artificial Neural Networks. The final decisions are based on the certainty of each classifier.

### References

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