

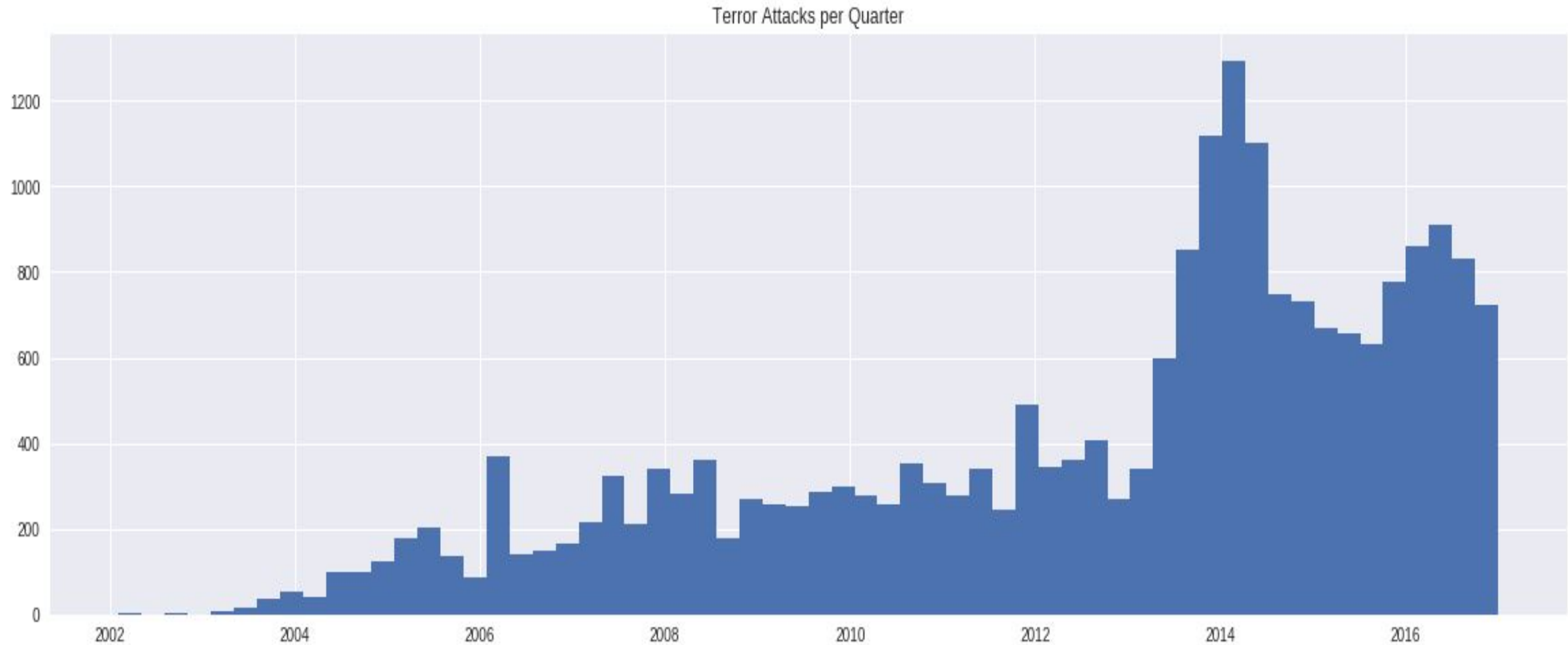


Global Terrorism Database

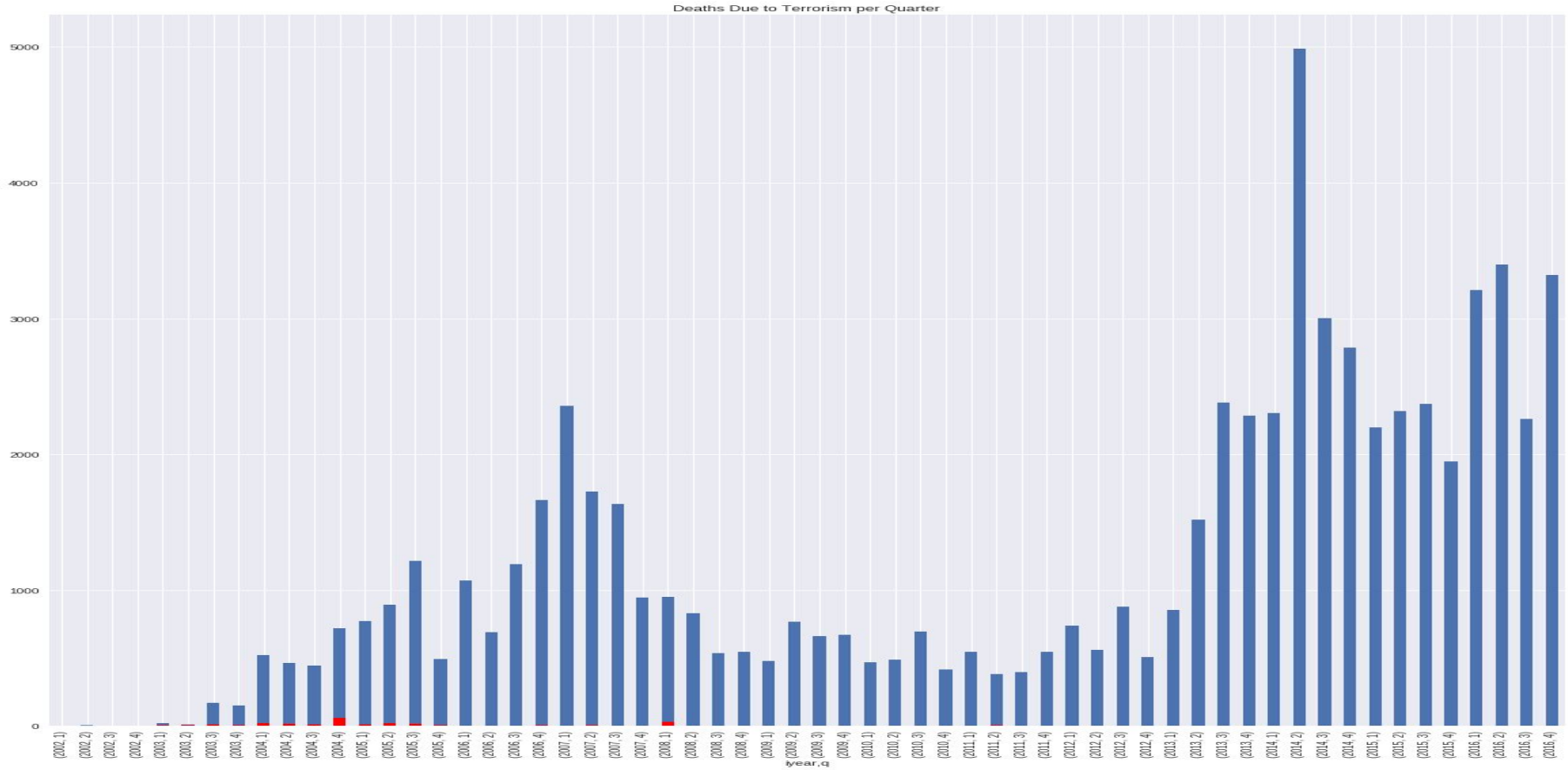
Russell Brown



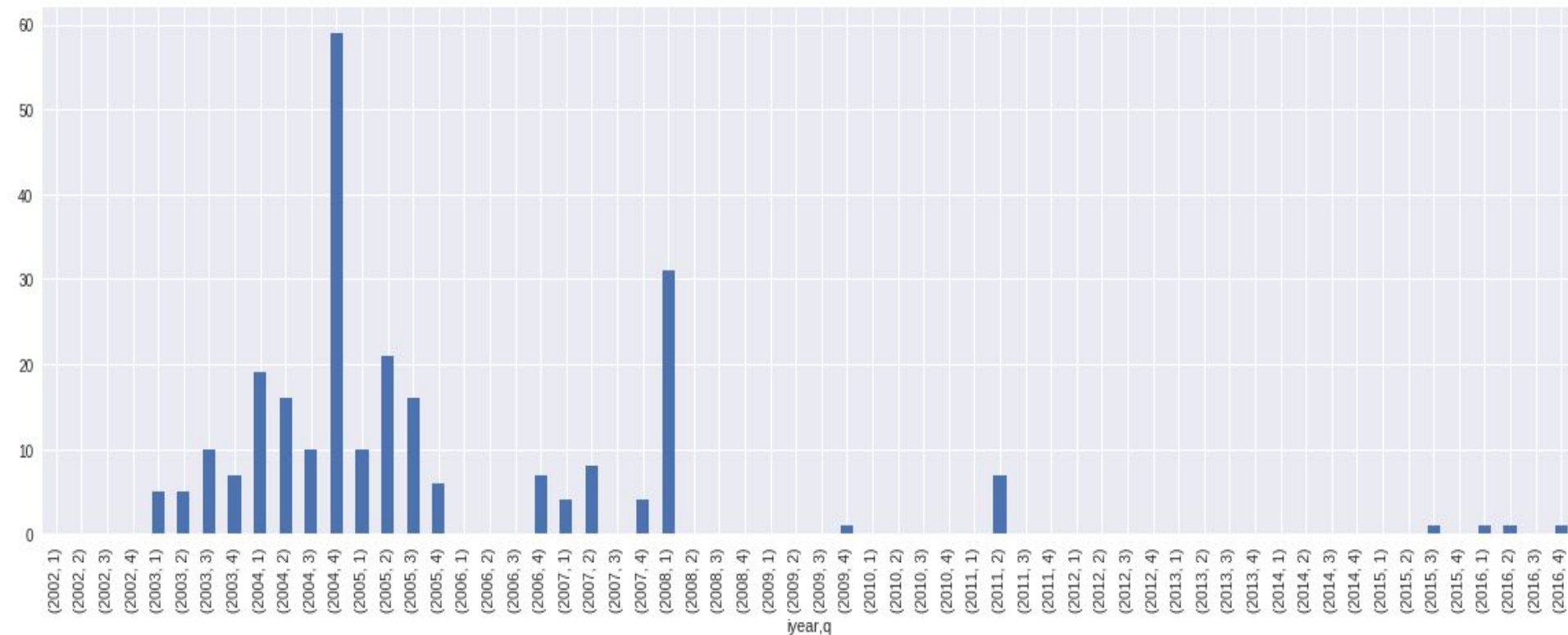
Number of Terror Attacks in Iraq per Quarter



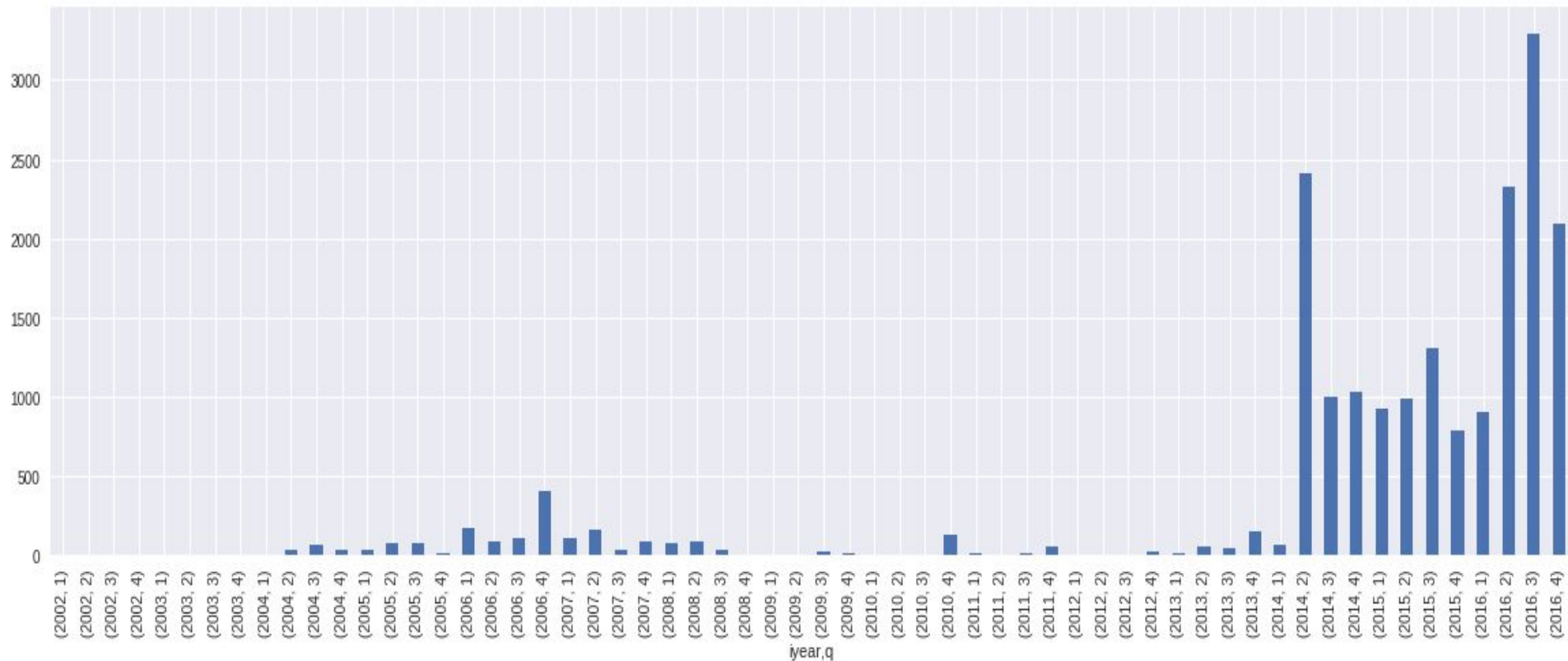
People Killed by Terror Attacks in Iraq



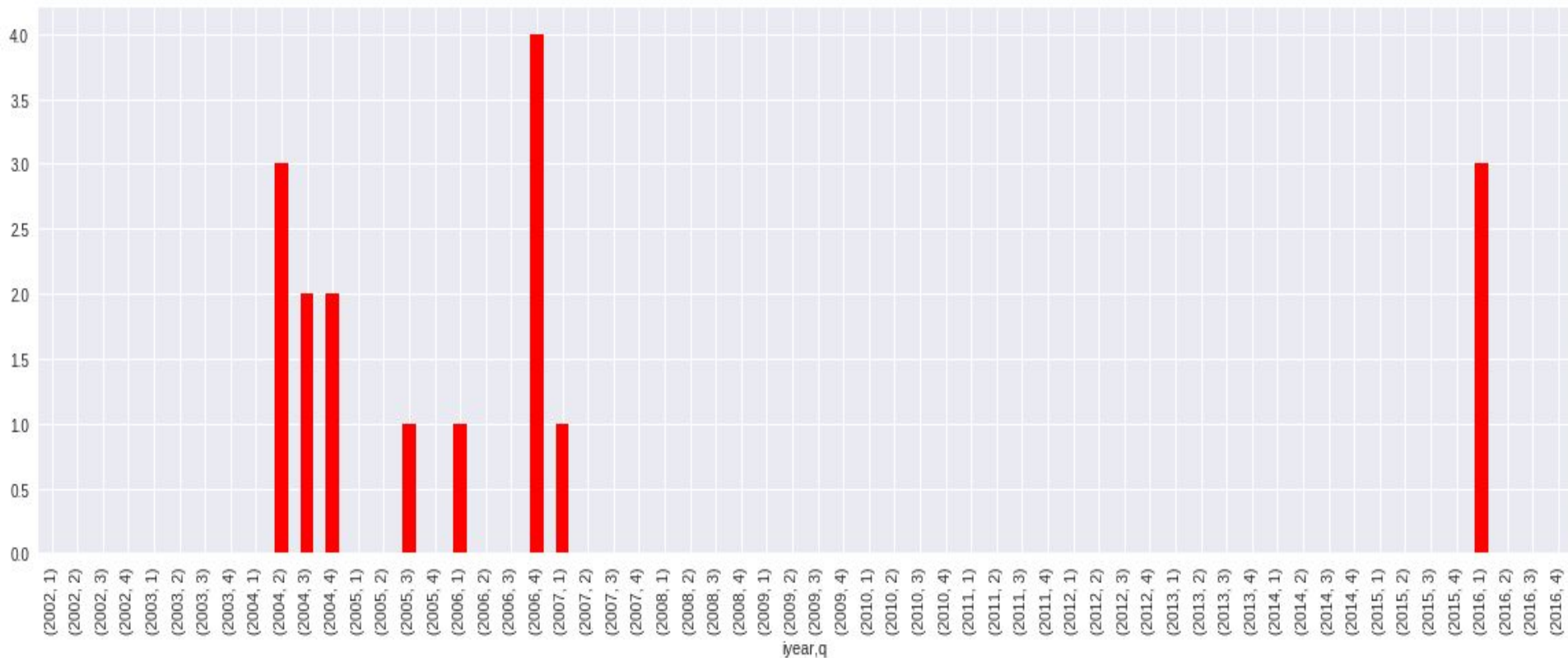
US Citizens Killed by Terror Attacks in Iraq



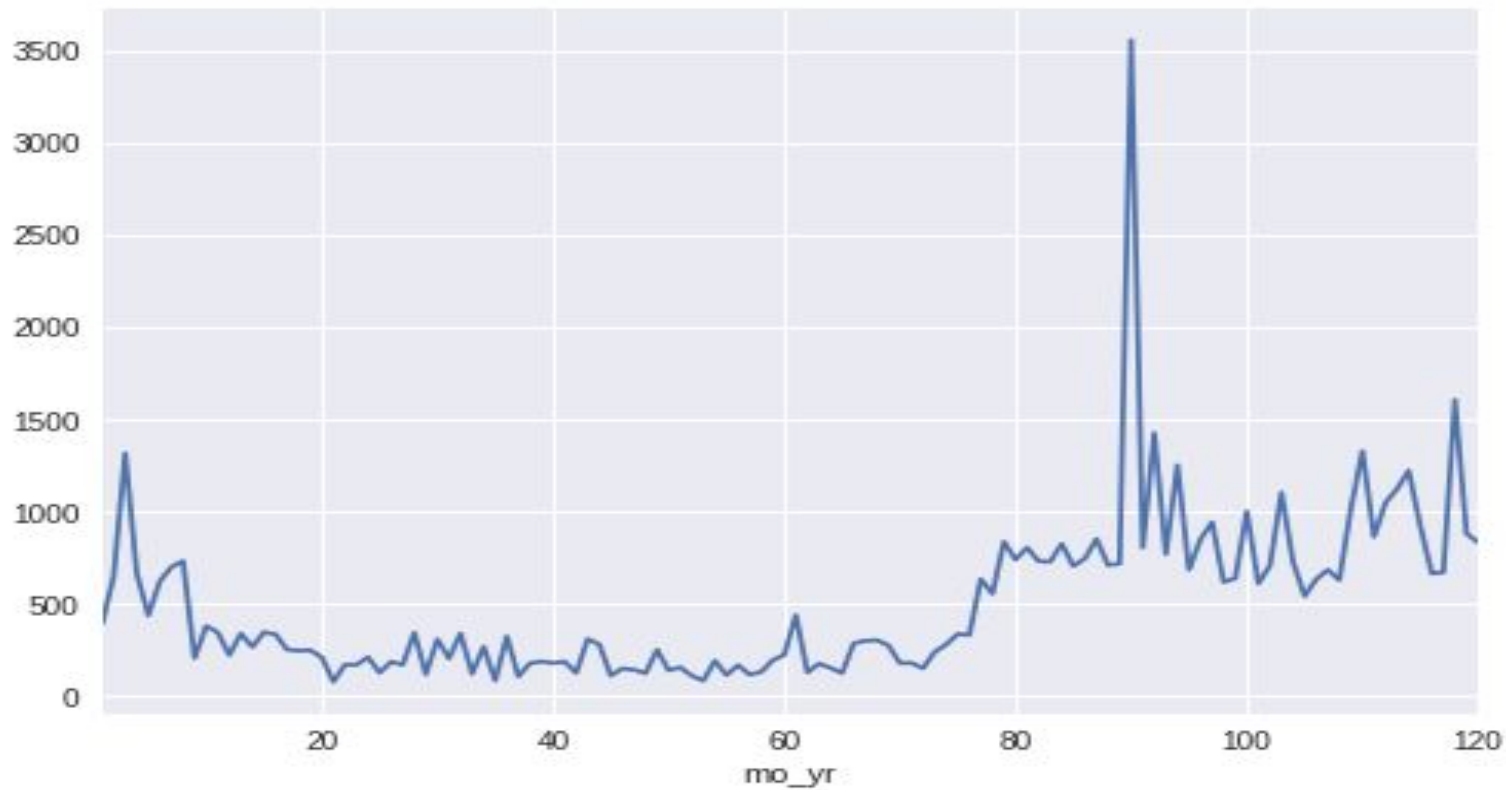
Hostages Taken in Iraq



US Citizens Taken Hostage in Iraq

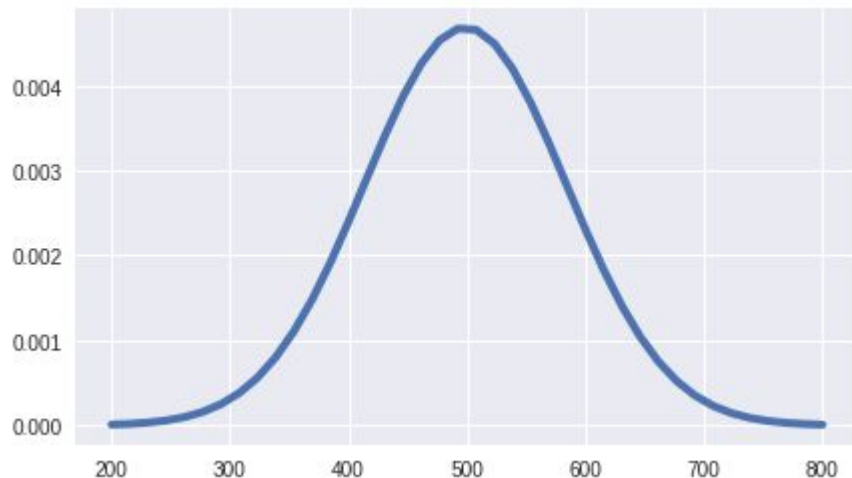


Terror Attacks in Iraq by Month, 2007-2016



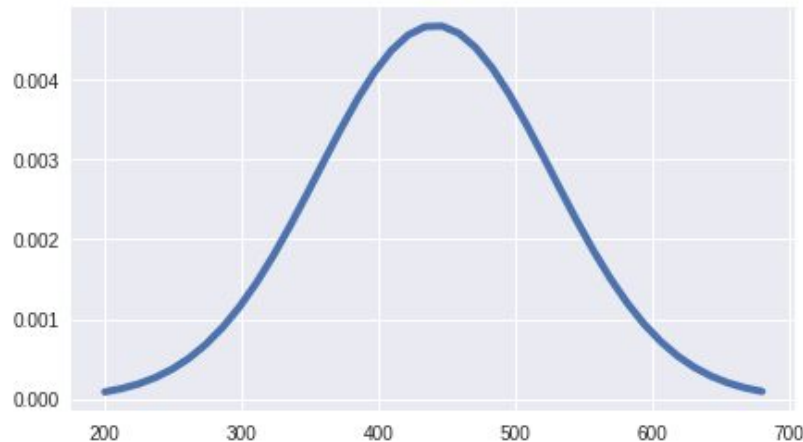
Prior Distribution of Mean and Standard Deviation

Mean



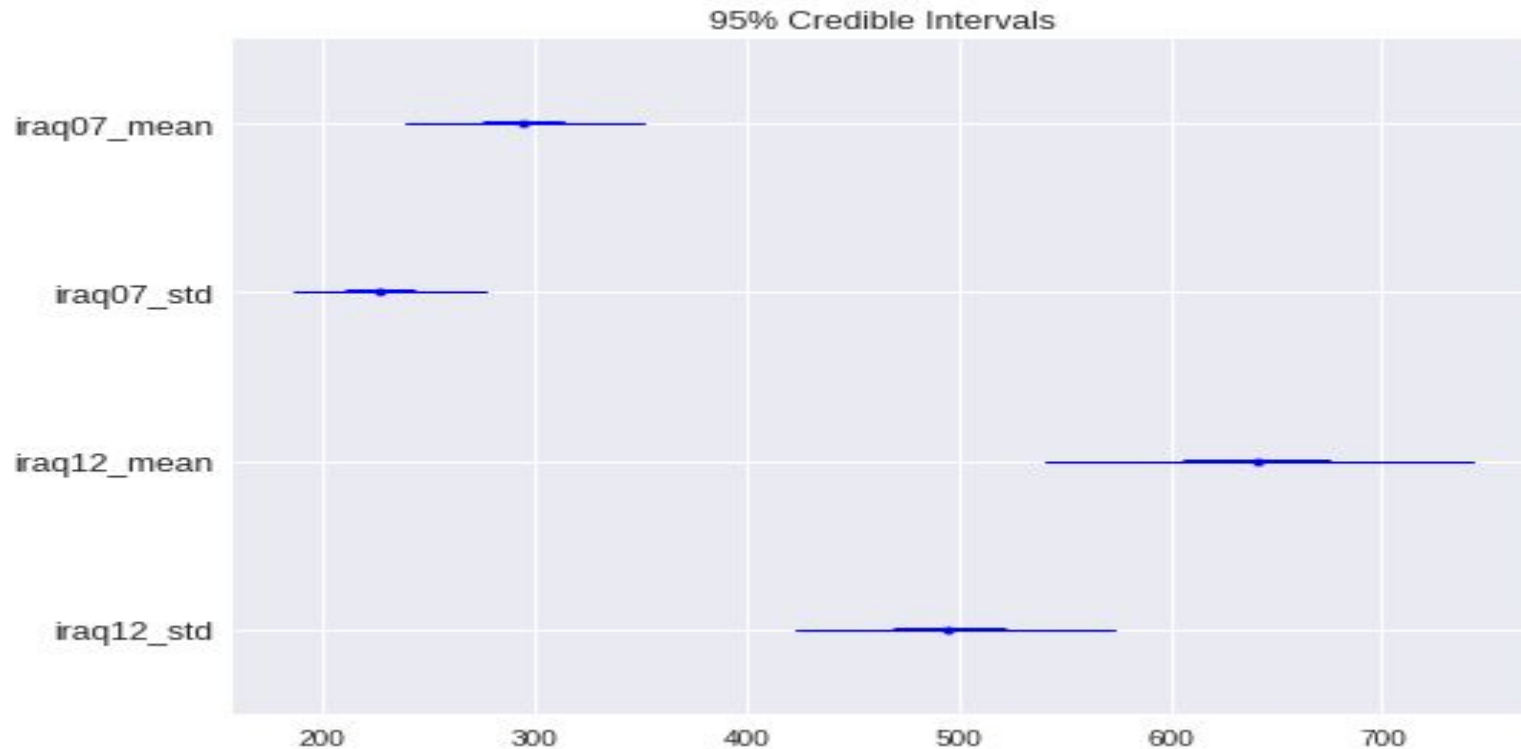
Mean: 498.543958333
Std: 85.1895943135

Std. Dev.

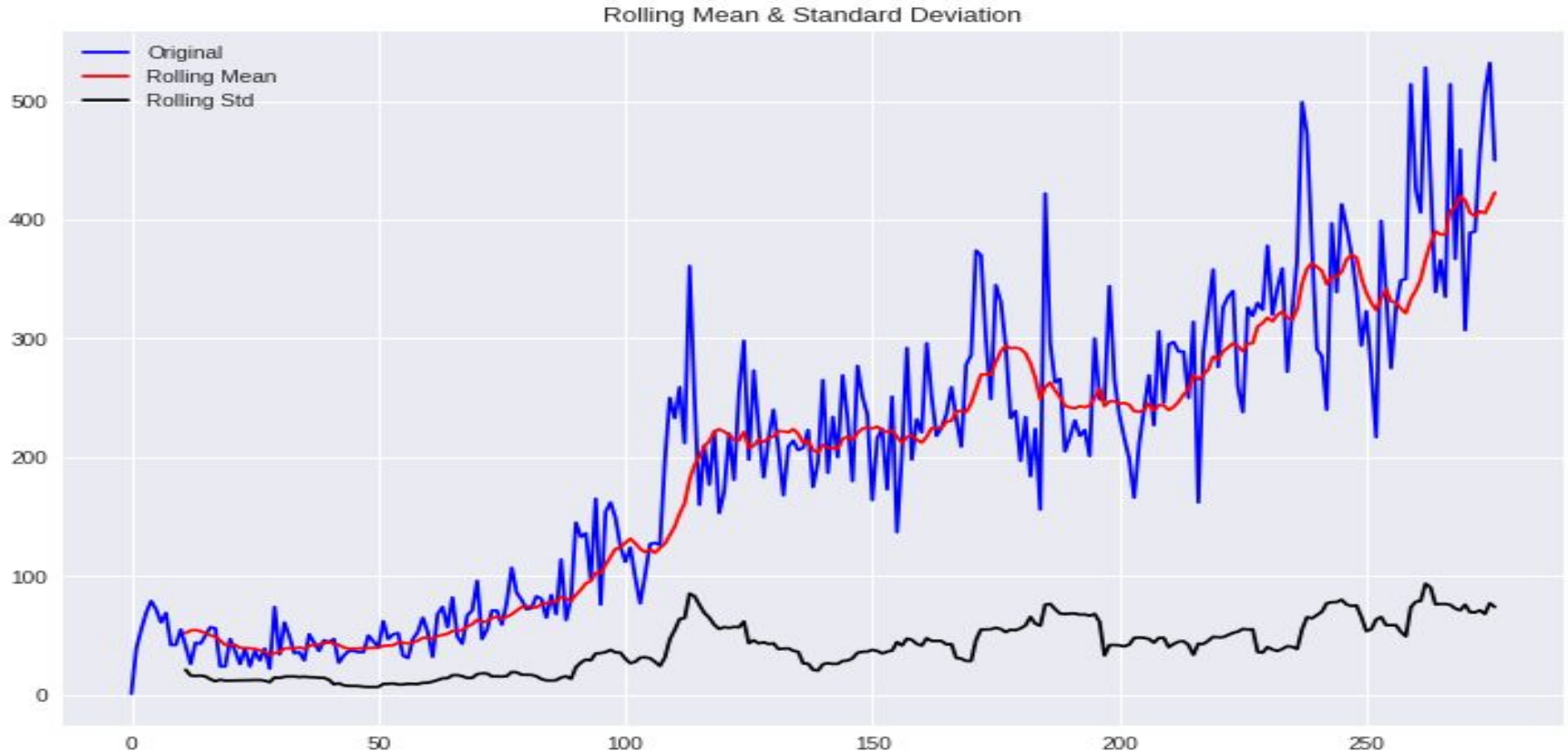


Mean: 441.011041697
Std: 85.1895943135

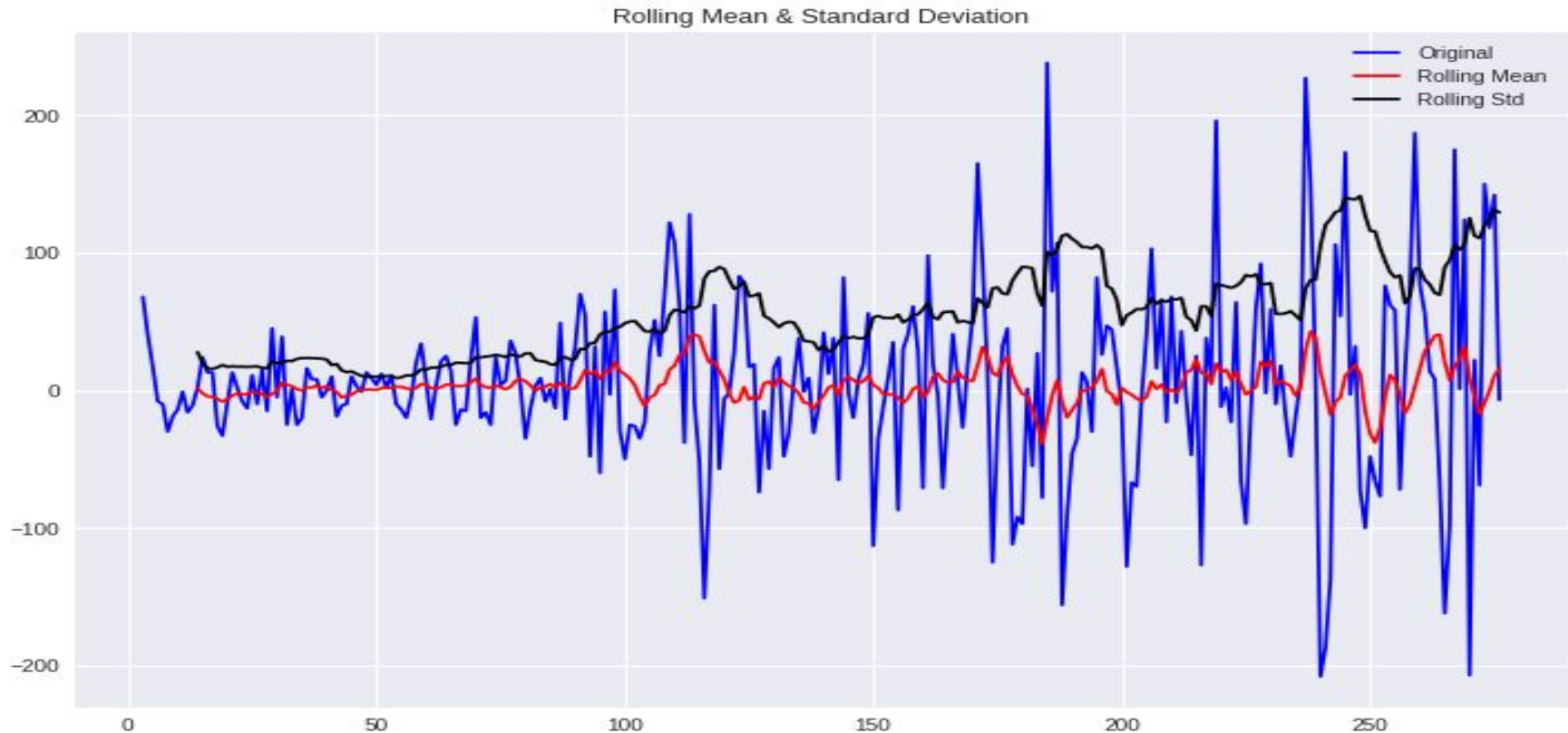
Bayesian Inference



All Terror Attacks Before 1993



3-Month Differences



Imputing Data: The Model

Seasonal ARIMA Model (SARIMAX)

```
model = SARIMAX( timeseries, order=(3,1,0), seasonal_order=(1,1,1,3) )
```

Split data by category of terror incident

Forecast next 12 months

Imputed Data (1993)

Bombing/Explosion	2425
Armed Assault	1255
Assassination	1043
Hostage Taking (Kidnapping)	144
Facility/Infrastructure Attack	582
Unknown	270
Unarmed Assault	71
Hostage Taking (Barricade Incident)	27
Hijacking	16