



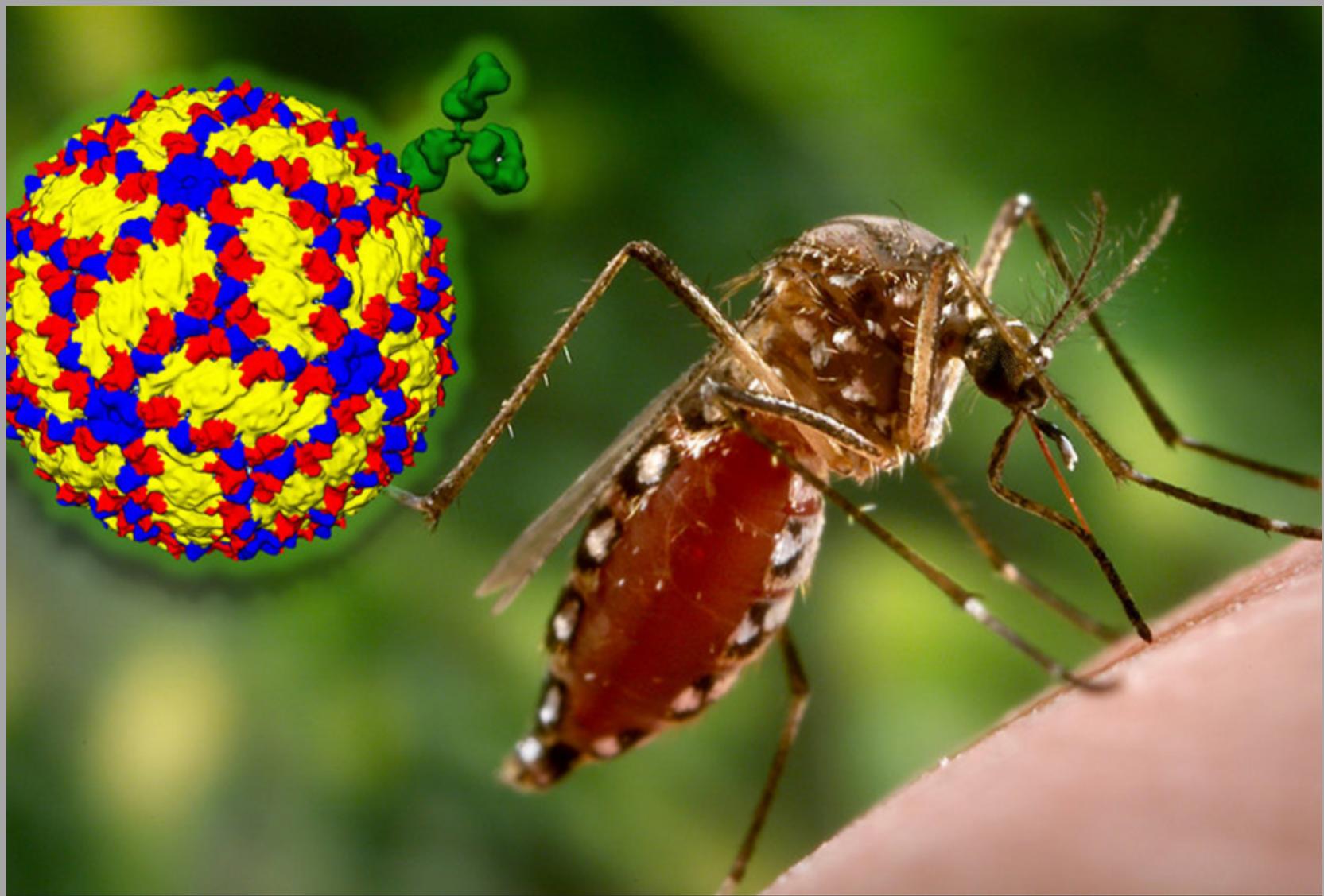
**STOP !**  
**Denque Virus**



DATA  
SCIENTIST

# GLIGOR VASILEV





# WHY FORECASTING

## EARLY WARNING AND PREPARATION

## RESOURCE ALLOCATION

## UNDERSTANDING OF DISEASE DYNAMICS



BUSINESS  
UNDERSTANDING

DATA

MODEL

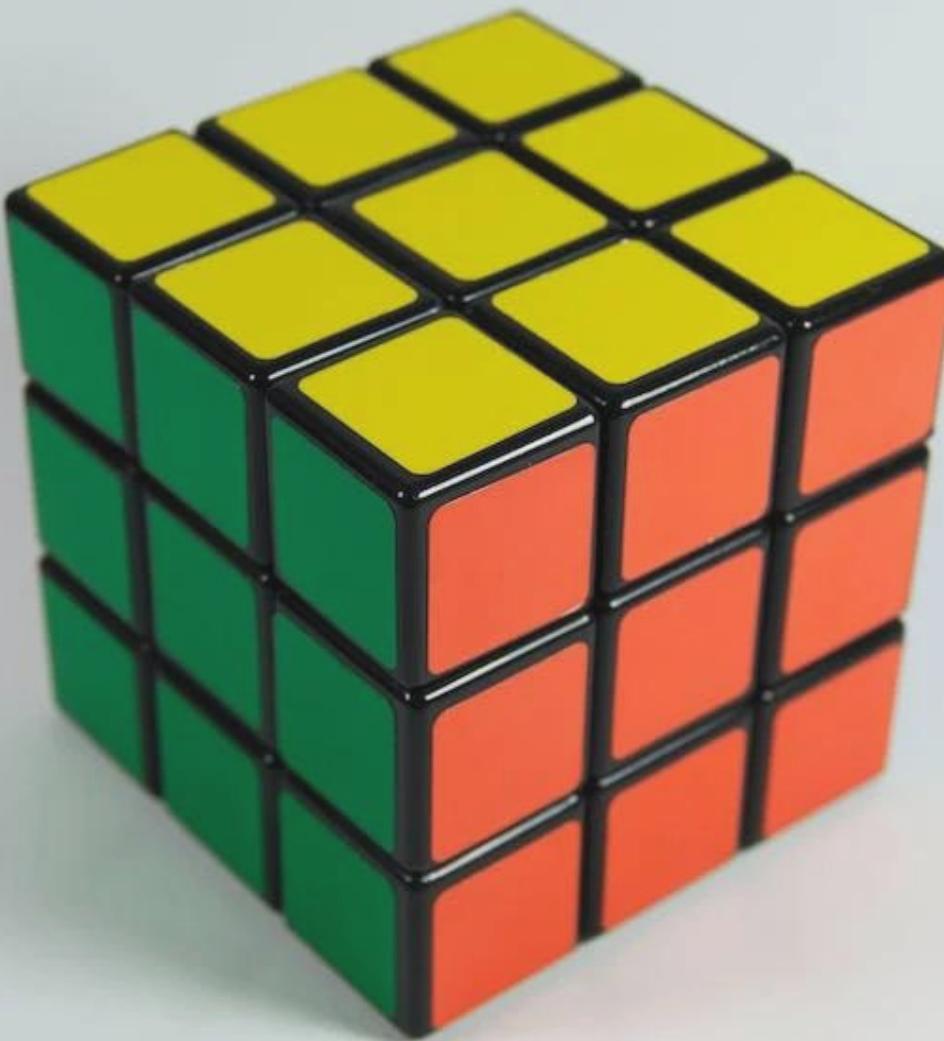
SUGGESTION

FUTURE  
STEPS



AGENDA

# BUSINESS UNDERSTANDING



# DATA



# SAN JUAN



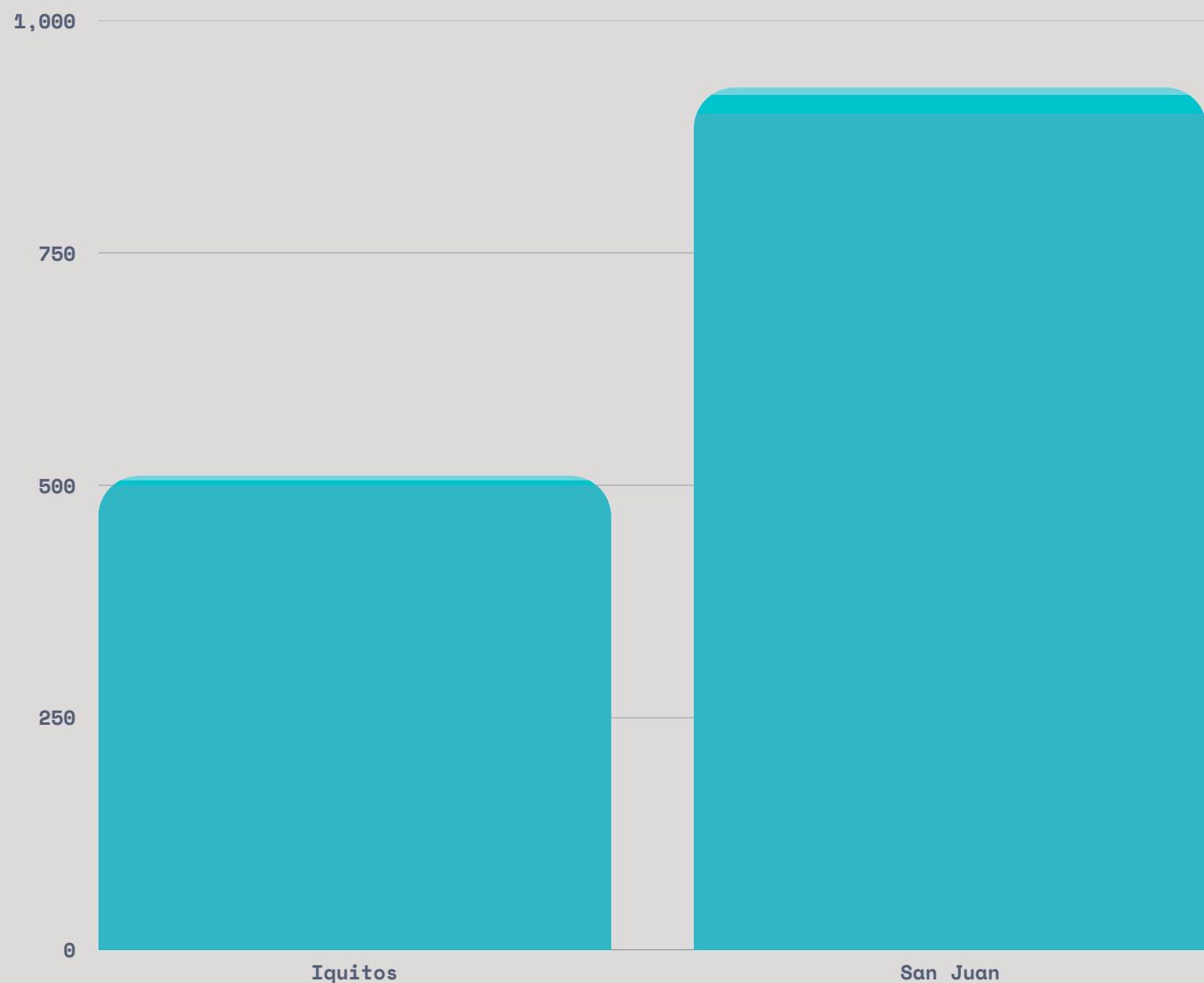
**DATA:  
FROM CDC TO NATIONAL OCEANIC AND ATMOSPHERIC  
ADMINISTRATION**

**FROM 1990 TO 2010**

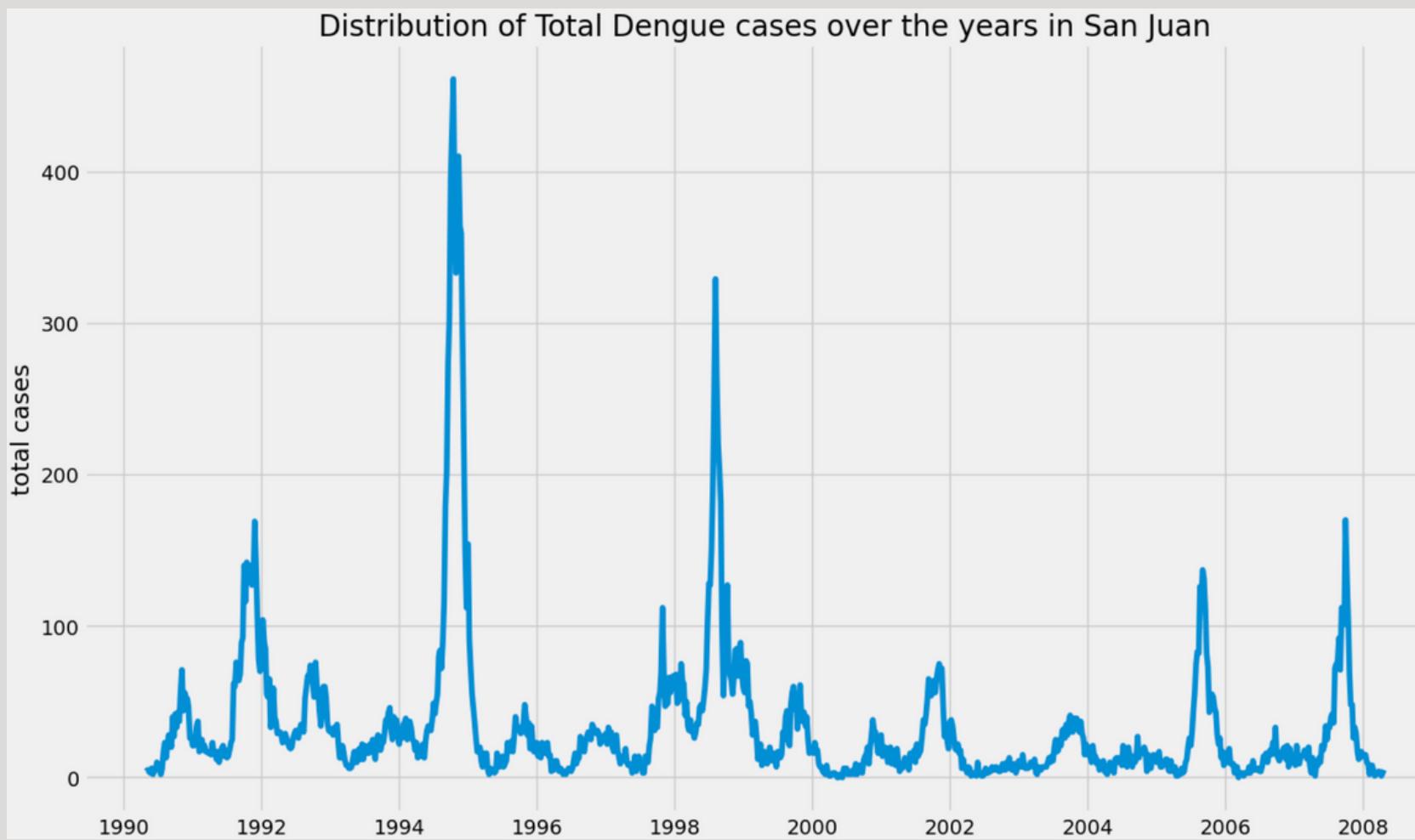
*Iquitos*

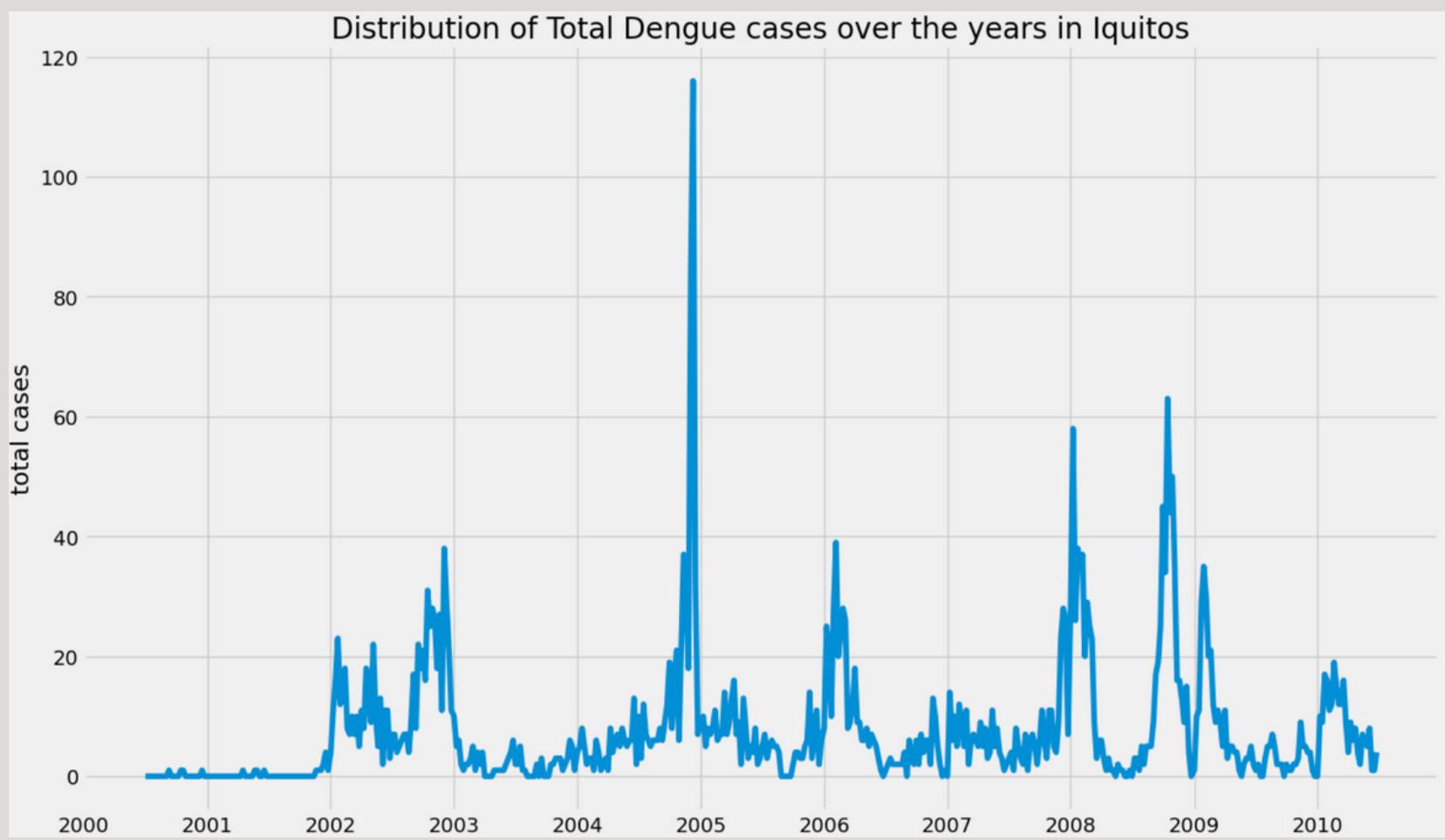


# Mean Number Of Cases Per City per Year



Distribution of Total Dengue cases over the years in San Juan

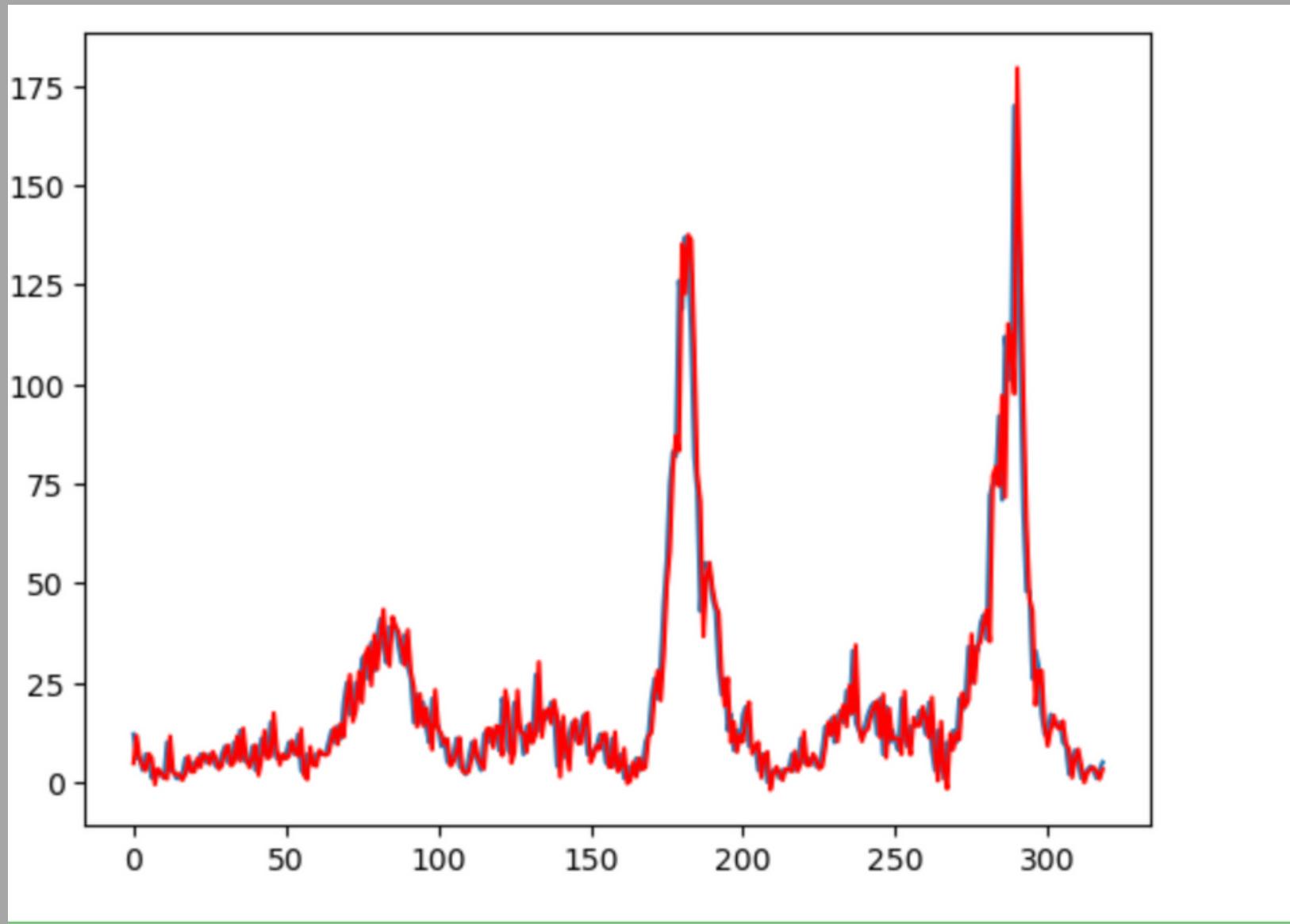




# MODELING

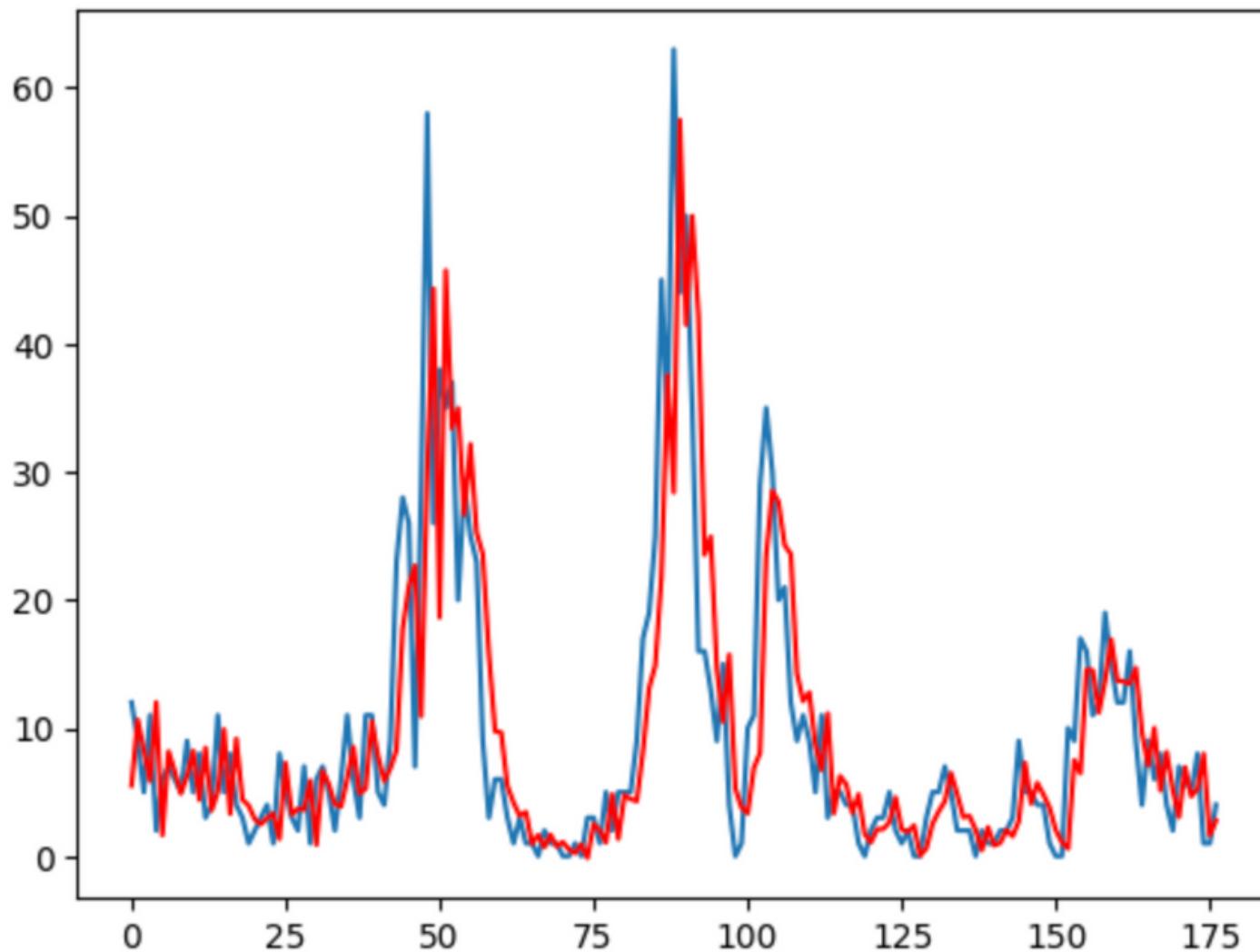


# ARIMA SAN JUAN



**CASES PER WEEK : 6.07**

# ARIMA IQUITOS



CASES PER WEEK : 4.57



**SUGGESTION**

**MOSQUITOES CONTROL  
PERSONAL PROTECTION  
EARLY DETECTION AND TREATMENTS  
PUBLIC EDUCATION  
SURVEILLANCE AND REPORTS**



## FUTURE STEPS

**IMPROVING DIAGNOSTIC TESTS**

**DEVELOPING MORE EFFECTIVE TREATMENTS**

**DEVELOPING VACCINE**

**UNDERSTANDING THE IMMUNE RESPONSE**

**THANK YOU AND ANY QUESTIONS**

