

NATURAL DISASTER STRESS TESTING

By Team Cycovid



MOTIVATION



Understanding Effects of Climate Change

Risk Management

Damage Protection

PROBLEM STATEMENT

What is the impact of typhoons to the economy under the effects of Climate Change in the APAC region?

RESEARCH: CLIMATE CHANGE

What is the effect of climate change on typhoons?

There has been an increase in the following factors:



FREQUENCY

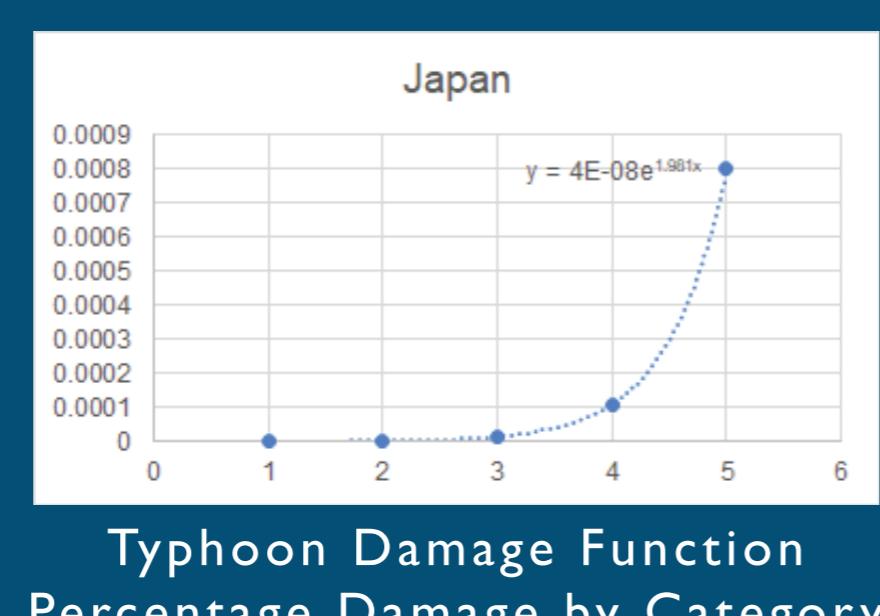
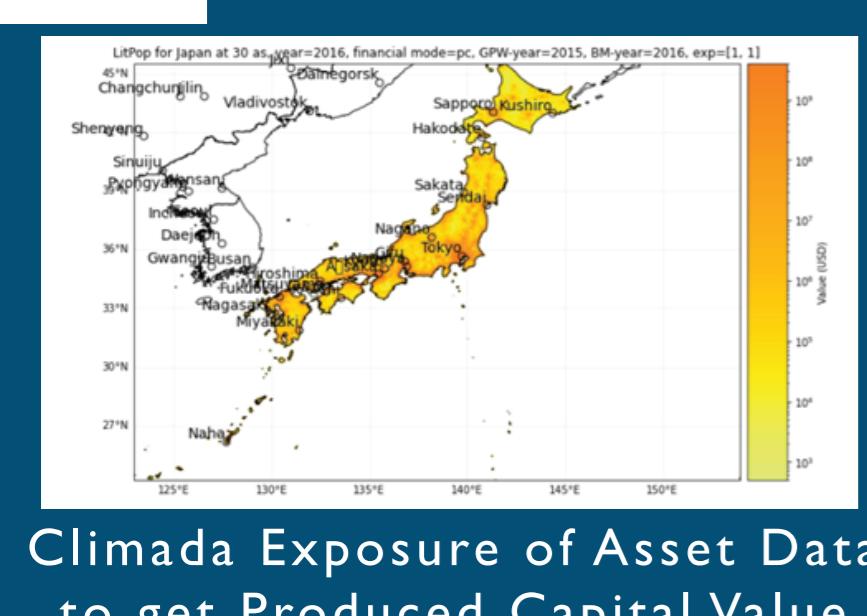


INTENSITY



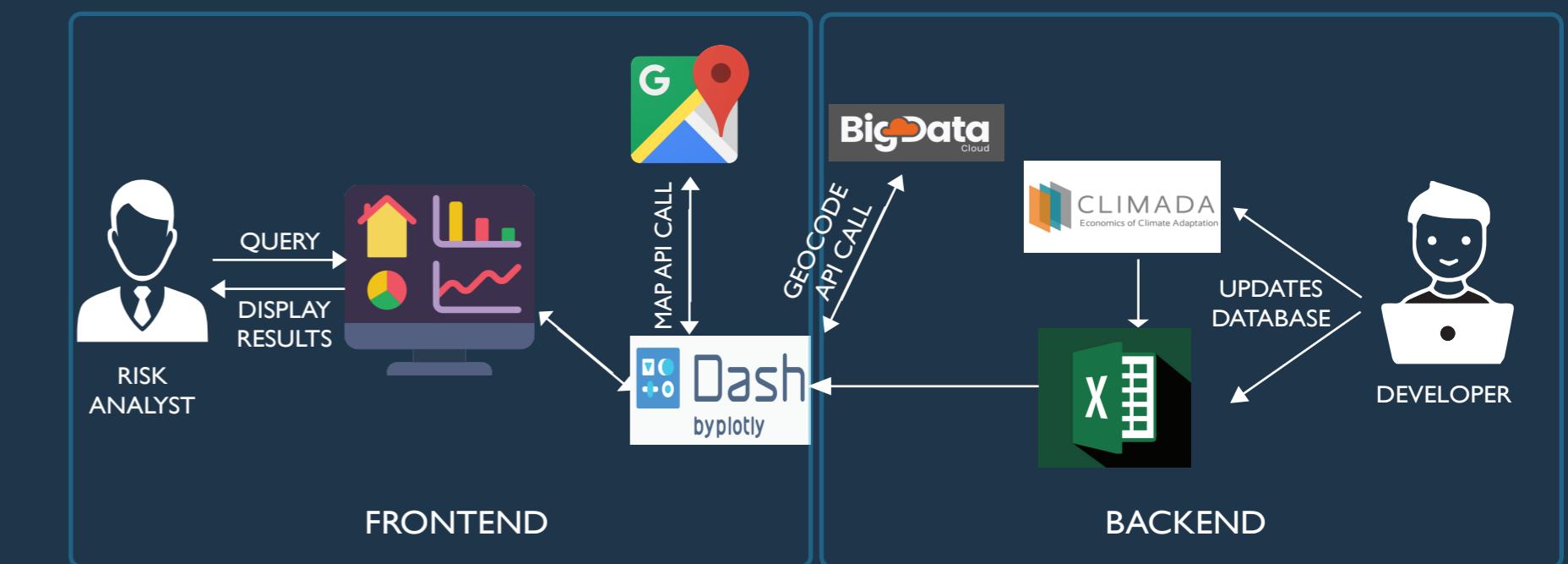
DURATION

TYphoon Damage Function

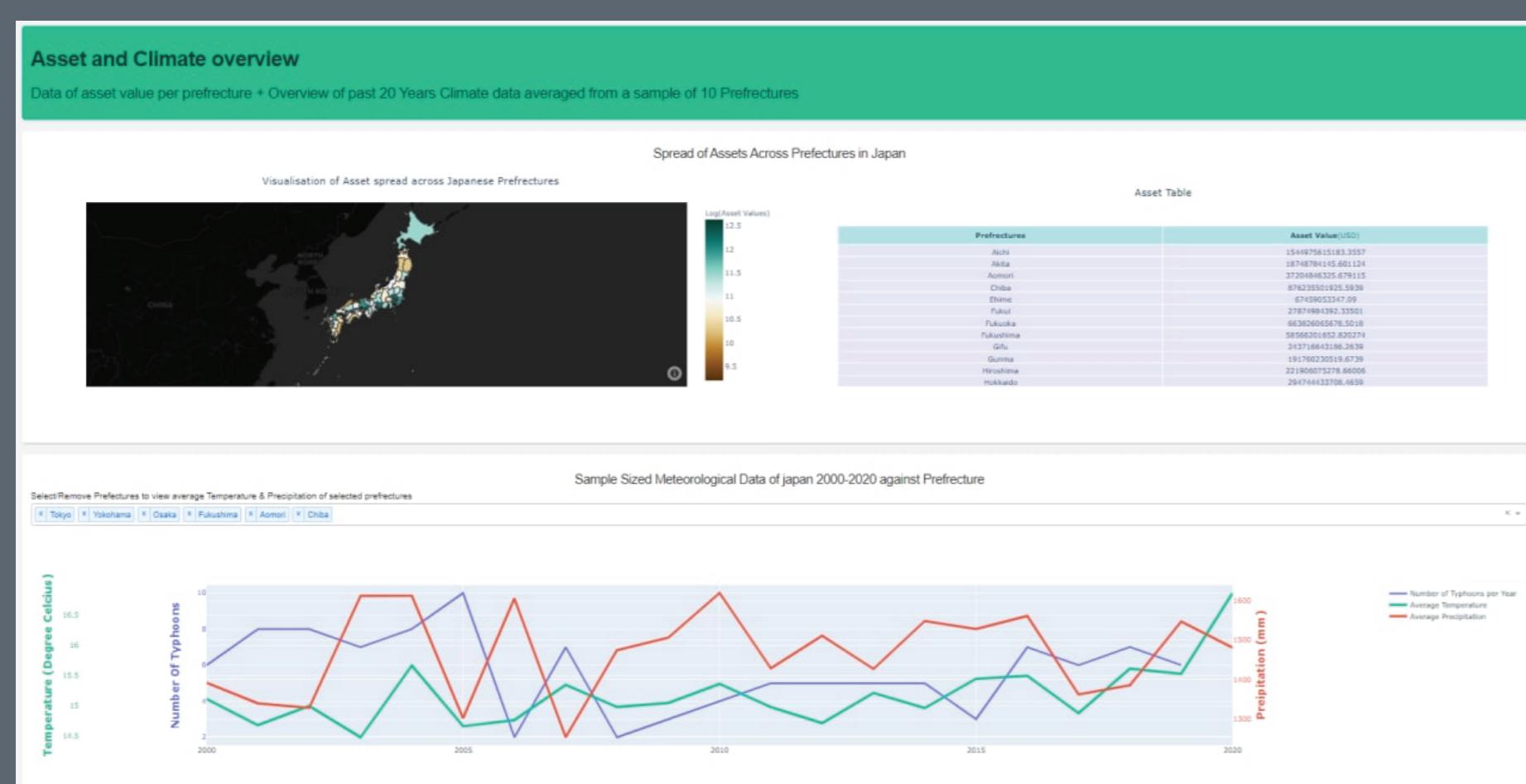


= DAMAGE VALUE BY PREFECTURE

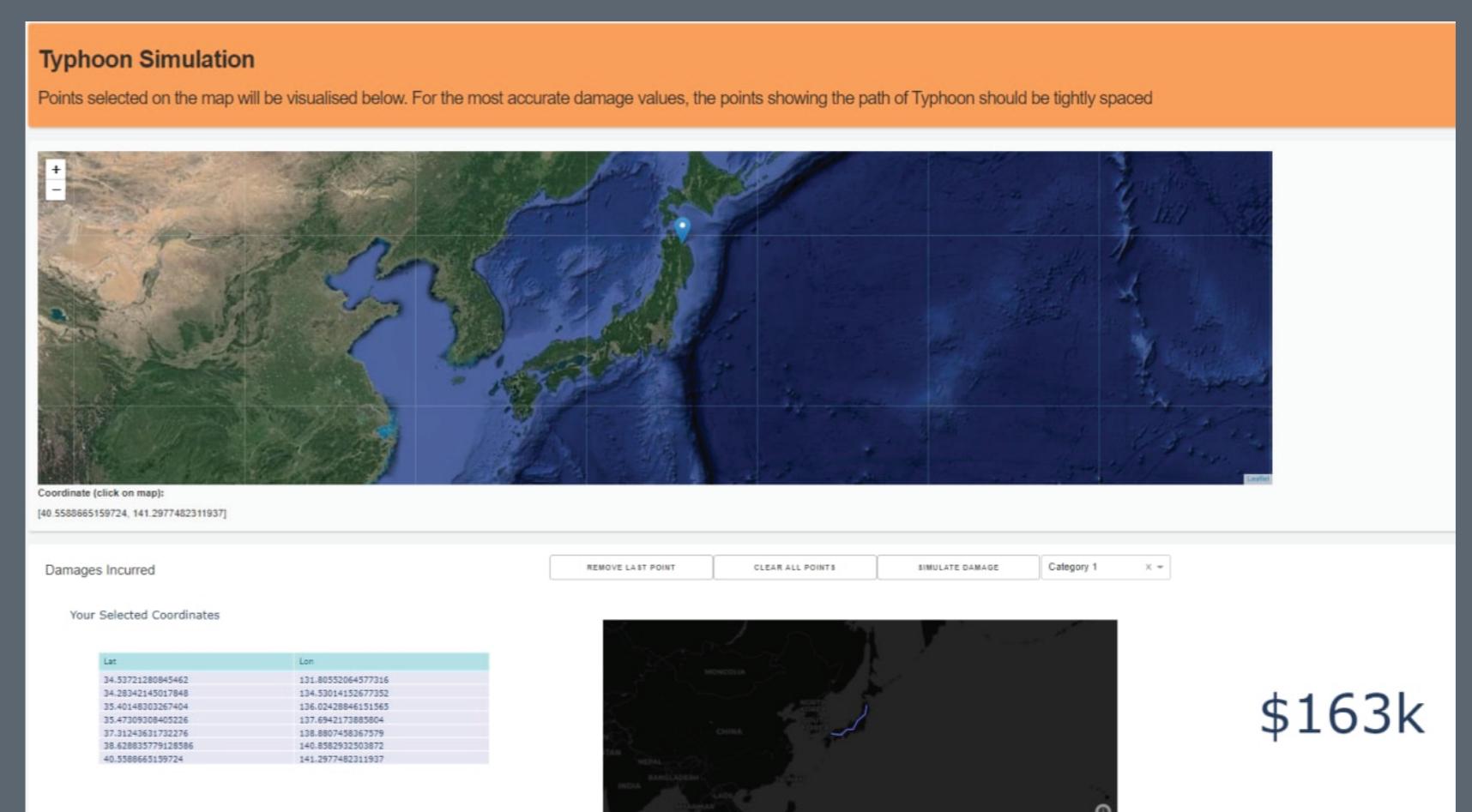
SOLUTION ARCHITECTURE



FEATURES



- > View Asset Spread Across the Country
- > Assess the Impact of Climate Change on Frequency of Typhoons



- > Visualize Historic Typhoon Paths and Damages
- > Simulate a Typhoon and Assess its Damage

KEY BENEFITS



ANALYSING ASSET SPREAD



ASSESS TRADING POSITION



MANAGE FUTURE RISK BASED ON CLIMATE CHANGE

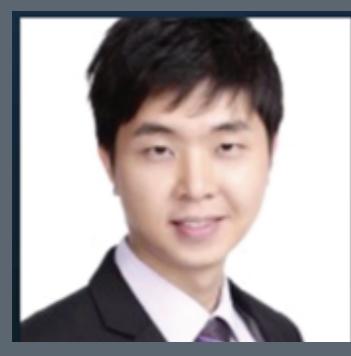
FUTURE WORK

- > Dashboard for other typhoon-prone countries
- > Migration into CS's internal application
- > Typhoon data and real-time data Scraper

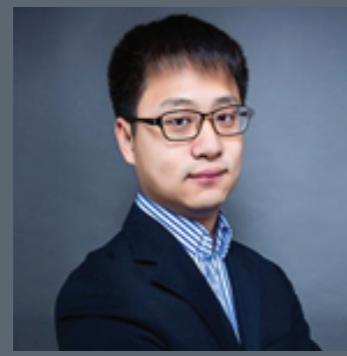
LESSONS LEARNT

- > Requirements communication needs to be clear
- > Take an early decision on solution architecture
- > Regular communication of updates within team

MENTORS



Mr. Huang Sile
Credit Suisse



Prof. Wang Hai
SMU

A big thank you to our mentors for their guidance and support throughout the project!

TEAM CYCOVID



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Data Analyst

OUR EXPERIENCE:

We all felt that the project was very value adding and we were all exposed to new skills, be it project management, understanding softwares and financial models or soft skills like being adaptable and flexible.

WATCH THIS VIDEO FOR AN INTRO TO OUR PROJECT!



CYCovid



