

Revolution in Disaster Prevention on the Property



1 Objectives and Motivation of this research

Motivation: Gokase Town's disaster avoidance

The 2016 Kumamoto Earthquake +

Repeated disasters caused by unusual climate

We want our Gokase Town to be a safe place to live and to be resistant to possible disasters.

Goals of this study

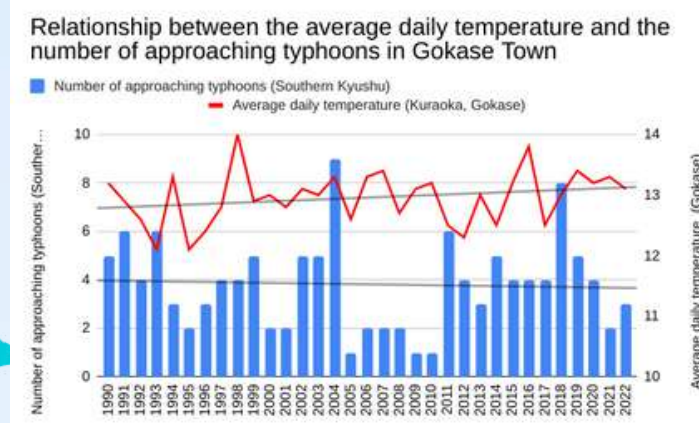
- To propose a measure to protect the properties of Gokase Town and the lives of its residents from the students' prospects.
- To reduce the damage caused by subsequent disasters.
- To raise awareness of disaster prevention in Gokase Town.

2 Initial Survey

(↓ Reference: <https://www.mri-jma.go.jp/Dep/typ/awada/TyphoonSST.html> Meteorological Research Institute, Japan Meteorological Agency)

Why have typhoons, a particular type of extreme weather, actually become stronger?

→ One of the reasons is rising sea surface temperatures.



Decadal average temperature(Kuraoka Gokase)

	1990-2000	2001-2010	2011-2020
Average	14.1°C	13.0°C	14.2°C

Average number of typhoons approaching per decade(Kuraoka Gokase)

	1990-2000	2001-2010	2011-2020
Average	4.4	3.0	4.7

This may lead to severe disasters

(↑ Reference: <https://www.jma.go.jp/jma/menu/menureport.html> Japan Meteorological Agency homepage)

3 Research Methods

- Examining Gokase's disaster prevention plans.
- Taking part in disaster prevention drills hosted by town officials.
- Visiting the Town Hall to obtain information about disasters hit in the past.
- Making a website for disaster prevention
- Proposing our plan to the town officials.(TBC)
- Helping the town to host a lecture about the disaster prevention with the website.(TBC)
- Updating the content of the website based on the feedbacks in the lecture.(TBC)
- Hosting an educational lecture for disaster prevention to the elementary/pre-school kids.(TBC)

5 Findings from the Research ②



Overview of the website for disaster avoidance



→ You can verify known precautions, evacuation routes and locations, and damage estimates.



4 Findings from the Research ①

Procedure

① From preliminary surveys and disaster prevention drills in Gokase town.

② From in the process of making the website for disaster prevention.



Disaster prevention drills



Visit to Gokase Town Hall

(↓ Reference: <https://tsutawarudesign.com/miyasuku5.html>)

A lot of elderly people joined, but very few younger generations.

• Designed to be easily readable by **the elderly** and **colorblind persons**.
→ The primary colors, **orange and blue**, are easily distinguished even by those who are color blind.
→ Every letter is **bolded** to make it simpler to read, even for older individuals who have trouble seeing small print.

Orange and blue

Bolded

このサイトは、ハザードマップを使って各地の防災情報を示してくれるサイトです。地震や土砂災害などたくさんの種類のハザードマップを見られるのでぜひ確認してみてください！

6 Upcoming Plans

Proposing to Gokase Town

Update the contents of the website

Making a pamphlet for disaster-prevention education

Help the town officials to utilize the course

Holding a lecture for disaster prevention

7 Acknowledgements

- University of Kyushu, Mr. Takahiro Sugiyama
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