

**The Time Zone Distribution of
Rains and Disasters caused by Rains
in Nagoya City, Aichi Prefecture**

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Rain Related Disasters in These Days

Recently, more than 100mm rain per hour is not unusual.

example: August 11~19 in 2021
Debris flow caused in Atami, Shizuoka Prefecture
Total rainfall was more than 1,200mm

The Reason We Chose Nagoya

Aichi is one of the prefectures with a lot of inland water flooding.

It was made from data on the damage amount caused by inland waters flooding.
(from 2006 to 2018)

rank	Prefecture
1	Fukuoka
2	Okayama
3	Aichi
4	Kyoto
5	Tokyo
6	Osaka
7	Hyogo
8	Iwate
9	Nigata
10	Saitama

What is the Disaster-causing Rain ?

- Rain with the damage amount shown by “The research of flood damage statistics”
- Rain which a heavy rain warning was issued for

Hypothesis

A lot of disaster-causing rains fall at night

Research Method

- ① Get the data of Disaster-Causing Rains in Aichi Prefecture from “The research of flood damage statistics” for the past 15 years (from 2003 to 2018).
- ② Get the data of rains for which heavy rain warnings were issued in Nagoya City.
- ③ Find out patterns by using ① and ②.
- ④ Visit Nagoya City and ask for the local residents’ awareness.

What We Have Done

“Research Method”

① Get the data of Disaster-causing Rains in Aichi Prefecture from “statistics of flood damage” for recent 15 years (from 2003 to 2018).

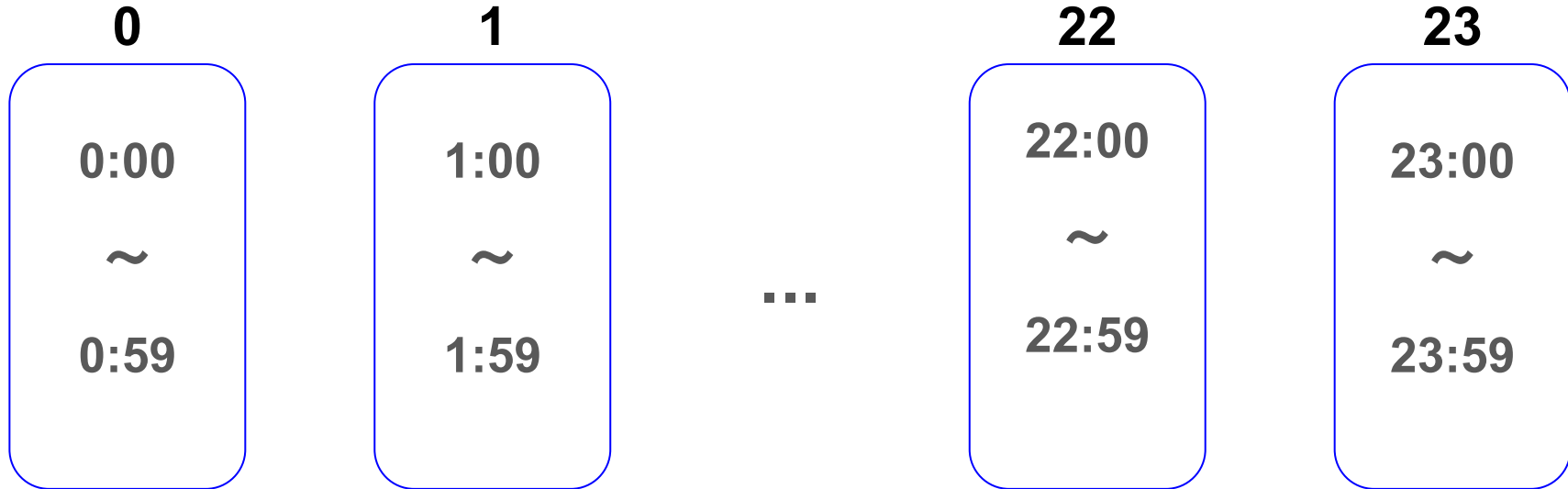


② Get the data of rains which heavy rain warnings were issued on in Nagoya City.



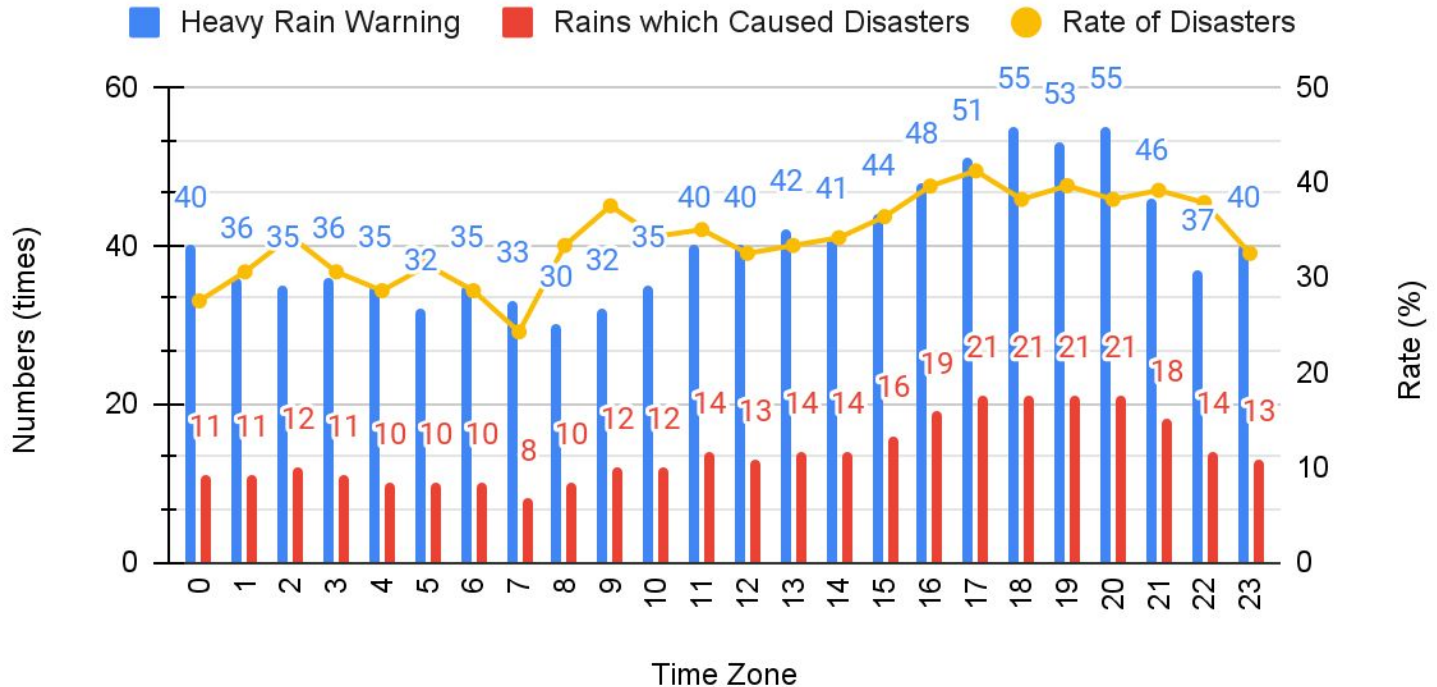
What We Have Done: About Time Zones

- We set time zone like the below.
- Each time zone has 1 hour.



What We Have Done: The Graph

The Time Zone Distribution in Nagoya City (2003~2018)



Advanced Research

- Visit Nagoya City.
- Ask for the local residents' awareness about rains and disasters.
- Compare the real voice with our result.

Thank You for Listening!

References

・政府統計の総合窓口(e-Stat),「水害統計資料」(“The Research of flood damage statistics”), 2003~2018年

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・気象庁 名古屋地方気象台,「愛知県の気候」「気象災害の記録」

<https://www.data.jma.go.jp/nagoya/> As of Nov 13th, 2021

The Time Zone Distribution in Nagoya City (2003~2018)

