Explore Weather Trends

Outline:

1. Download the date of Nagoya and the world.

```
Tools: SQL, Excel

SQL queries:
Find country:
    SELECT *
    FROM city_list
    WHERE country IN ('Japan');

Find city:
    SELECT year, city, avg_temp
    FROM city_data
    WHERE city IN ('Nagoya') AND year BETWEEN '1844' AND '2013';
```

Find world:

SELECT *
FROM global_data
WHERE year BETWEEN '1844' AND '2013';

2. Select the common date(no date in some years).(1844~2013)

Calculate the moving average temperature.

A.cycle time : 30 years The 1th begin at 1873 end at 2013

B.tool: Excel

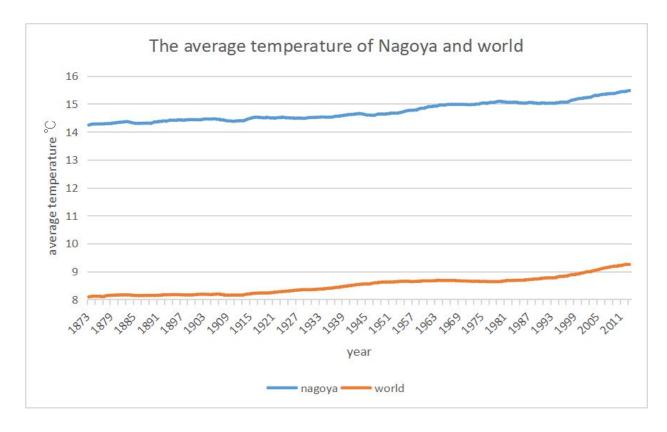
3. Trends visualization

A.Chart elements

B.The number of elements on x-axis and y-axis.

C.Use different color

4. Graph



Find:

- 1. The average temperature of Nagoya is higher than the world, and it is continued to 2013.
- 2. The average temperature of Nagoya is getting warmer and warmer, this is same to the world.
- 3. The variety of Ngoya is bigger than the world. variety of temperature: Nagoya(14.24=>15.48,1.24) World(8.09=>9.27, 1.18)
- 4. In the past 100 years, the both of temperature is going up slowly, but it is rising sharply in recent years.